

PERSONNEL TECHNOLOGY

**AN EXAMINATION OF HISPANIC AND GENERAL POPULATION
PERCEPTIONS OF ORGANIZATIONAL ENVIRONMENTS**
(Harry C. Triandis, Principal Investigator)

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AN EXAMINATION OF HISPANIC AND GENERAL POPULATION
PERCEPTIONS OF ORGANIZATIONAL ENVIRONMENTS:
FINAL REPORT TO THE OFFICE OF NAVAL RESEARCH

Harry C. Triandis

Final Report

August, 1985

DEPARTMENT OF PSYCHOLOGY
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An Examination of Hispanic and General Population Perceptions of
Organizational Environments: Final Report to the Office of Naval Research

Harry C. Triandis,

University of Illinois

Hispanics are fast becoming the most important minority group in the United States. Demographic trends are quite clear: within a decade it is expected that ten percent of the U.S. population will be Hispanic. Estrada (1985) points out that Hispanics accounted for 23 percent of the increase in the U.S. population between 1970 and 1980. Since they are more youthful than the general population and more fertile, they are bound to become a major segment of the U.S. population in the future. Furthermore, immigration patterns have changed. In 1960 the percent of the U.S. population that was foreign born placed Mexico seventh, as a source of these immigrants, with 5.9% of foreign born coming from that country. In 1979 Mexico was number one, with 17.8% of the foreign born. In addition, in 1979, Cuba was sixth, with 5.1% of the foreign born. In the 1980s considerable immigration from San Salvador, and Guatemala, as well as Columbia, has resulted in more than a quarter of the foreign born having Hispanic backgrounds. Estrada also points out that in some states the percentages of the population of Hispanic origin is very substantial (37% in New Mexico, 21% in Texas, 19% in California, etc.).

Unlike the prevailing stereotype, of "wetbacks", Hispanics are urban. There are over two million in the Los Angeles area, almost two million in the greater New York area, and more than .5 million in the Miami and the Chicago areas.

Given these demographic trends, the Navy will have to recruit increasingly larger percentages of its manpower from the Hispanic segments of the population. At the present time 2.5 percent of the Navy is Hispanic

(Eitelberg, 1985). Since more than 7 percent of the U.S. population is Hispanic, there appears to be a problem in recruiting Hispanics.

Eitelberg (1985) also reports that 53 percent of Hispanics are qualified by Navy criteria, but only 23 percent participate in the Navy. In other words, there is a possibility of doubling Hispanic participation in the Navy. However, to do so the Navy will have to develop procedures that will treat Hispanics somewhat differently from the way it deals with nonHispanics. This raises a major policy issue, for an organization where the emphasis is on identical treatment. This issue is not going to be discussed in this report because it is political/philosophic/ethical rather than scientific. The focus of the report will be on the findings concerning how the Hispanics are similar and different from nonHispanics. Given those findings, policy makers will have to decide how to respond to the differences.

The purposes of the project that is summarized in this final report included the following:

1. Identifying what is unique about Hispanic culture. This topic requires first arriving to some kind of understanding of what is culture, and then identifying those aspects of Hispanic culture that are distinctive from the nonHispanic culture of the U.S.
2. Identifying if there are important variations in Hispanic culture that can be traced to regional background, such as Mexico, South America, Cuba, Puerto Rico, and so on.
3. Identifying elements of culture that show major similarities between Hispanics and nonHispanics in the U.S.
4. Identifying elements of culture that characterize Mexican, Puerto Rico, Cuba and other segments of Hispanics
5. Identifying the theoretical and methodological strategies that are likely to give the best answers to the above mentioned topics. This latter

area concerned the utility of a purely emic (within culture) methodology, such as used by anthropologists, a purely etic (between cultures) methodology, such as often used by psychologists who develop a measurement instrument in one culture and use it, with minor modifications, such as translation, in other cultures, and a mixed methodology developed by Triandis (1972) which uses emic constructs, but psychological methods. The utility of results obtained from these three strategies was to be evaluated.

Overview of the Project Results

The three strategies for the collection of data about Hispanics resulted in several reports that utilized each strategy. The emic approach is represented by Technical Reports Nos. 1, 3, 4, 22, and 23; the etic approach is represented by Technical Reports Nos. 5, 7, 8, 9, 10, 12, 21, 25, and 26; the mixed methodology is represented by Technical Reports Nos. 11, 13, 14, 15, 17, 19, 20, and 28.

In addition, we presented some theoretical integrations concerning the relationship of cultural differences and social behavior (Technical Report No. 2), a method for the measurement of the acculturation of Hispanics to the U.S. (Technical Report No. 6), a summary of the major findings concerning the way Hispanics differ from nonHispanics, which emphasized the importance of allocentric vs. idiocentric tendencies (Technical Report No. 16). The latter study has lead to the development of an intensive study of the cultural variable collectivism vs. individualism, which is reflected at the individual level of analysis by the allocentric vs. idiocentric tendencies.

In other words, Hispanic culture is collectivist while the U.S. emphasizes individualism. In order to understand this contrast we undertook a number of additional studies, reflected in Technical Reports Nos. 30, 31, 32, and 33. Finally, we also presented studies that contrasted explicitly the etic with the emic plus etic strategy (Technical Report No. 24) and

studies that provided methodological refinements (Technical Reports Nos. 18 and 27) and confirmations of previous findings (Technical Report No. 29).

In terms of publications, the purely emic approach yielded none. The problem with this approach is that it does not lend itself to the kinds of generalizations that psychological journals require, and the anthropological findings appeared limited to the U.S. Navy and thus again were of limited generality. The purely etic approach yielded Hui (1982). The mixed methodology yielded Triandis, Lisansky, Setiadi, Chang, Marin and Betancourt (1982), Triandis, Marin, Hui, Lisansky and Ottati (1984), Triandis, Marin, Lisansky and Betancourt (1984) and Triandis, Hui, Albert, Leung, Lisansky, Diaz, Plascencia, Marin, Betancourt and Loyola (1984). The theoretical integrations yielded Triandis (1983a), Triandis and Brislin (1984), and Triandis (1984). The method of measurement of Hispanic acculturation resulted in Triandis, Kashima, Hui, Lisansky and Marin (1982). The methodological refinements resulted in Hui and Triandis (1983; 1985; in press a), Marin et al. (1983), Hui, Drasgow and Chang (1983), Triandis and Marin (1983b), and Triandis, Kashima, Shimada and Villareal (in press). Finally, the study that contrasted the emic plus etic with the etic methodologies resulted in Triandis and Marin (1983a).

The major conclusion from comparisons of the methodologies is that the mixed methodology is definitely preferable to the other two. It yields more publishable results, it obtains more penetrating insights concerning the culture under study, and the results generalize more broadly.

However, another way to view the utility of the approaches is to contrast the anthropological (emic) with the other two, and ask those who are likely to utilize research findings to judge their utility. To test this idea we extracted from each technical report those key findings that could be unambiguously linked to either the anthropological (emic) or the psychological (etic) approach. In that study the etic plus emic or mixed

methodology was categorized as psychological. We identified 41 generalizations that could be rated by a sample of Navy users. Eighteen of these generalizations could be traced to the anthropological methodologies and the other 23 to the psychological. Dr. Jeffrey Schneider, then with ONR, asked a panel of five Navy users of social science findings to review these 41 findings and rate them on a scale as follows:

- 1 = Extraordinarily significant and useful in my job.
- 2 = Helpful and useful.
- 3 = Helpful, may or may not be useful; O.K. but not important.
- 4 = Irrelevant for my job.
- 5 = Harmful, confusing, an undesirable addition to information explosion

The ratings given to the 41 findings (generalizations) appear in Table 1.

It is clear from Table 1 that the judged utility of the two sets of findings is quite similar. Six psychological and four anthropological findings are judged as extraordinarily useful by some panelists,¹ another eight psychological and seven anthropological as useful, and the remaining nine psychological and seven anthropological findings are considered of possibly some utility, but some judges consider their utility questionable. As far as Navy utility is concerned there is clearly no superiority of one method over the other.

The differential rate of publication of the two sets of findings may be due to idiosyncratic factors, such as the greater availability of publication outlets, the previous publication record of the two sets of investigators, greater motivation to publish, etc.

Clearly, ONR should support some research of each kind, if the utility of the research to Navy researcher users is to be considered as the criterion.

Table 1

Ratings Given to 41 Findings by a Panel of Navy Research Users

Scale: Extraordinarily useful = 1
 Useful = 2
 Questionable utility = 3
 Irrelevant = 4
 Harmful = 5

<u>Rating</u> (mean of 5 panelists)	<u>Number of Findings</u>	
	<u>Psychological</u>	<u>Anthropological</u>
1.6	3	3
1.8	3	1
2.0	3	3
2.2	5	4
2.4	2	2
2.6	5	3
2.8	<u>2</u>	<u>2</u>
Total	<u>23</u>	<u>18</u>

Another way of examining the issue of emic versus etic measurements is to focus on data based on studies which have utilized the two methodologies. This was done by Triandis and Marin (1983a) in a study which utilized (a) ready-made role differentials [from Triandis, Vassiliou and Nassiakou (1968)] and (b) role differentials specially developed from an emic analysis of Hispanics. The same sample responded to both instruments, in counter balanced order. A comparison of the results of the two questionnaires showed that the emic analysis identified many more cultural differences. In other words, the emic analysis which is transformed into an etic methodology as outlined by Triandis (1972) penetrates the cultural differences more effectively. On the other hand, the Triandis and Marin paper indicates that even the insensitive etic approach can identify a cultural difference if that cultural difference is very strong. Thus the simpatía script identified by Triandis, Marin, Lisansky and Betancourt (1984) was detectable in both of the instruments described above. It must be concluded that if only the major cultural differences are of interest an emic analysis, which requires much time and effort, is not justified. But if one wants to do a really thorough job, the use of an emic analysis as the first step of the construction of psychological instruments is justified.

The remaining sections of this report will examine the following topics:

1. What is culture?
2. What is Hispanic culture?
3. What variations in culture are traceable to Hispanic subgroups?
4. What is common and culture specific for Hispanics and nonHispanics?
5. How can Hispanic culture be placed into a broader framework of cultural differences in social behavior?
6. What are the implications of our findings for the Navy?
7. Scientific value of project.

1. What is Culture?

Many reviewers of studies linking culture to psychological phenomena have commented about both the lack of a useful definition of culture and the lack of theory linking this construct to social behavior. After a review of cross-cultural studies of organizational phenomena, Roberts (1970) concluded that progress in that area requires (a) an understanding of the link between culture and psychological processes and (b) a more productive definition of culture. After reviewing the major theoretical and systematic approaches used in cross-cultural psychology, Jahoda (1980) concluded his excellent chapter with the statement that "... further theoretical advance in cross-cultural psychology will probably depend to a considerable extent on a more rigorous analysis and operationalization of the concept of 'culture'" (p. 131).

The carelessness with which psychologists have used the concept to refer to persons who share a language, nationality, race, religion, or even a profession indicates the need for systematic examination of this construct.

The definition of culture problem, of course, is of long standing in anthropology, in which numerous definitions have been proposed (Kroeber & Kluckhohn, 1952) but consensus has not yet developed. Some anthropologists have argued that culture is everything human-made (Herskovits, 1955); others have argued that one can identify a culture by examining the range of behaviors that occur in different settings, in a particular geographic location, at a particular historical period (Goodenough, 1970); still others have proposed that cultures reflect shared meanings. Pelto and Pelto (1975) presented the latter view this way: "The private system of ideas of individuals 'is culture' and it is of great adaptive significances to the local group (e.g., family) whether or not they shared the ideas with anyone else" (p. 13).

Keessing (1981), while examining the question of how to define culture, classified the perspectives of different anthropologists as follows: First there are those who see cultures as adaptive systems versus those who see them as ideational systems. The latter group breaks down into those who see cultures as cognitive systems, the chief exponent being Goodenough (1971/1981), those who see them as structural systems (e.g., Levi-Straus, 1958), and those who see them as symbolic systems (Geertz, 1973; Schneider, 1968). Keessing concluded that culture is a system of competences shared by a group of people. It is an individual's "theory of what his fellows know, believe and mean, of the code being followed, the game being played, in the society in which he was born" (p. 58).

Goodenough (1971/1981, p. 55) states that "culture provides a set of expectations regarding what kinds of behavior are suitable in given situations; but only in highly ritualized situations, where suitable options are minimal, it is possible to predict the precise behavior." Thus according to Goodenough (1957), to study culture one must discover the standards of expectations and "whatever it is one has to know or believe in order to operate in a manner acceptable to the members of a society" (p. 102).

Geertz (1973) argued that humans are "suspended in webs of significance" (p. 5) and "culture ... [consists of] those webs" (p. 5). The anthropologist must therefore analyze cultures by interpreting or giving meaning to the events that are observed. What anthropologists write is "fiction" in the sense that it is fashioned out of the "thick descriptions" of particular events "Our task is to uncover the conceptual structures that inform our subjects' acts" (p. 27). Culture is likened to a computer "program for governing behavior" (p. 44). Therefore, one should not just analyze institutions (e.g., marriage) but rather provide a detailed account of the specific ideas individuals have about behavior under various

circumstances (e.g., what husbands and wives think about behavior). In a tour de force of "thick description," Geertz examines the details of Balinese cockfights, describing the extraordinarily complex rules, behavior patterns, and how particular individuals engage in given behaviors. Geertz then shows how the patterns of behavior found in cockfights reflect the structure of Balinese society. He interprets the isomorphism of the dimensions of cockfights and social structure as the essence of an analysis of Balinese culture. Therefore, culture is a construct in the mind of the anthropologist; it is not an entity "out there." This contrasts with Goodenough's view of culture, which Geertz rejects.

Goodenough (1971/1981, p. 59) reacts to Geertz and finds his own analysis providing more information: "We take the position that culture consists of the criteria people use to discern the artifacts as having distinctive forms and the criteria people use to attribute meaning to them. We address the problem of how these criteria, which are individually learned in social exchanges, can be said to be public at all, a problem Geertz does not address."

Perhaps a useful way to summarize the argument is to follow Rohner (1981) and contrast the realists and the nominalists. Realists assume that culture exists in the collective minds of members of a community; these members share cognitive maps (Murdock, 1945). Nominalists assume that culture is a logical construct, abstracted from behavior, and as such, exists only in the mind of the investigator (Spiro, 1951).

Before deciding on a definition, it may be useful to explore the extent to which individuals do share systems of meanings. This requires collecting enough data from each individual to obtain the individual's pattern of thinking about an aspect of the social environment, and then comparing the several patterns across several individuals to discover what they have in common. If communalities are identified at the level of individual data,

then the realist definition of culture may be adopted; if the investigator must elaborate, abstract, or supply links to extract a common theme, then a nominalist definition is likely to be more fruitful. This study was done by Triandis et al. (1984). The results showed that the individual models of Hispanics were distinct from the individual models of persons from other cultures. Furthermore, the study indicated that though there were some consistent patterns of meanings across individuals of similar cultures, which supported the point of view of the realists, these patterns were relatively subtle and accounted for only a small percent of the variance in individual judgments. Thus, a social scientist is needed to interpret such subtle patterns and therefore the nominalists also have their point of view supported by this study.

In conclusion, culture can be conceived as "consistent meanings about reality across individuals who share a language, live during the same period, and in a geographically clearly defined area thus allowing frequent interaction."

This conception of culture emphasizes the idea that culture can be found among individuals who are interacting (by using the same language) and reach understandings about what is appropriate behavior (norms), what is expected from persons in various positions in a social system (roles), what is desirable (values) and what assumptions should remain unchallenged (unstated assumptions). Unstated assumptions may include norms and values as well as beliefs. Social behavior is in part a reflection of culture and in part the result of specific habits, beliefs, and attitudes acquired by individuals as a result of their socialization, and their personal experiences. A discussion of the specifics of how the elements of culture are reflected in social behavior can be found in Triandis (1980).

2. What is Hispanic Culture?

In order to identify Hispanic culture we proceeded with multiple methodologies. First, a number of anthropological observations were made and reported in Technical Reports 4, 22, and 23. In parallel, a review of the anthropological and social science literatures was reported in Technical Report No. 3. Intensive interviews were carried out and reported in Technical Report No. 1. Second, the major aspects of Hispanic culture were probed by studying Hispanic and nonHispanic Navy recruits. The aspects studied included achievement motives, self concepts, values, locus of control, a sample of social attitudes, perceptions of supervisor-subordinate relations, stereotyping, familism, the acceptability of various kinds of behaviors, attributions of success and failure, role perceptions, the affective meaning of key constructs, and conceptions about the behavior of a good supervisor.

The general methodology of these studies involved the testing of Hispanic and nonHispanic recruits in three Navy recruit stations in Florida, California, and Illinois. When a Spanish surname recruit was to be classified, the officer in charge of the administration of the particular questionnaire checked the recruits' self-identification, on a form that is routinely used by the Navy on which the category "Hispanic" is present, thus allowing the applicant to describe himself as a Hispanic. Once a person was classified in the Hispanic group another recruit was randomly chosen from the cohort of recruits that was being processed by the classification officers in the particular Naval recruit stations. Thus, the nonHispanics included Blacks as well as Whites and other people who had not been identified as Hispanics. This sampling strategy treated the nonHispanics as "the noise" and the Hispanics as "the signal." If the signal was strong enough to overcome the high variance of the noise, then it was worth paying attention to it.

This procedure was developed to identify cultural differences which are strong (important) enough to overcome the large variance of the nonHispanics. The strategy was also chosen because many U.S. minorities have reached high levels of acculturation and it is inappropriate to consider them as different from the nonminority mainstream of U.S. society.

Once the two samples were identified, the Hispanics were contrasted with the nonHispanics. In these analyses the nonHispanics were split into Black and White and the Hispanics were split according to the demographic information that we obtained in a separate questionnaire. In that questionnaire we also obtained information relevant to the level of acculturation of Hispanics as well as concerning whether the Hispanic was predominantly of Mexican, Cuban, Puerto Rican, or "other" background.

As mentioned earlier, the instruments administered to tap the various constructs were developed by means of two strategies. The etic strategy used already existing instruments. The emic strategy developed instruments appropriate for Hispanics.

The emic strategy consisted of two steps. The first required samples of Hispanics to provide answers in an unstructured interview. For example, in constructing a set of scales to study stereotypes, we asked both Hispanics and nonHispanics to indicate what attributes "come to mind" when they think of "Mexicans," "Puerto Ricans," etc. Then the most frequently mentioned attributes were incorporated in a questionnaire in which the concepts "Mexican" etc. were presented and subjects were required to judge the frequency of the attribute (e.g., intelligent) on a scale from 1=Never to 9=Always. Clearly, already existing instruments may or may not have attributes that are specifically appropriate for the particular ethnic group doing the judging or the group being judged. As mentioned above, in one study (Triandis & Marin, 1983a) we utilized both strategies keeping the judges and stimuli (constructs) constant, and changing only the scales

(which were either previously used or specially constructed) and we found that the specially constructed scales do identify more cultural differences. However, even the simpler etic strategy does identify a major cultural difference, if such a difference exists, and given the time savings involved in using already existing instruments, that strategy can be recommended in some cases.

The instruments used in the studies reported in the present section used both approaches. When a very good instrument was already available it was used. When such an instrument was not available we developed it using the emic strategy.

Results

While details of these studies require reading of the reports mentioned above, it is possible to give an overall view of the results.

1. Hispanic Navy recruits are very much like nonHispanic Navy recruits. An overwhelming impression is that there are more similarities than differences; thus the differences mentioned below should be examined in the context of these similarities. There are a number of indications that the Navy is getting an atypical sample of Hispanics. For example, while results of comparisons of Hispanics and nonHispanics on locus of control (see Technical Report No. 25) obtained with representative samples show that the Hispanics are more external than the nonHispanics, that difference is not obtained among Navy recruits (see Technical Report No. 9). Attributions of success and failure are extremely similar for Hispanic and nonHispanic Navy recruits. The self-images of Hispanics and nonHispanics in the Navy are extremely similar.

On numerous other attributes (e.g., modernity) the Hispanic and nonHispanic recruits are similar. Furthermore, observations reported by Rojas suggested that the Navy is obtaining Hispanics who are highly acculturated, relatively to the rest of the Hispanic populations of the U.S.

For instance, while divorce rates among Hispanics are lower than the rates for the U.S. population, many of the Navy's Hispanics come from families where divorce has occurred at the same rates as for the U.S. general population.

Szalay's (1985) results, which show that Anglos are quite similar to U.S. Mexican-background subjects, less similar to Puerto Ricans and Cubans, and least similar to Mexicans from Mexico and Hispanics from South America, can also be used to understand our results. Most of the Hispanics we studied were Mexican-background subjects. This reflects the composition of U.S. Hispanics, who according to the Census Bureau (May, 1981) is 60% Mexican, 14% Puerto Rican, 6% Cuban, and 8% South American, with 12% of "mixed" background. Our own samples of recruits tended to mirror that distribution (with the exception of the Cubans, who were under-represented and the mixed who were over-represented). In other words, given (a) Szalay's results and (b) the fact that we had mostly Mexican background Hispanics, it is not surprising that we found few differences.

2. Collectivism versus individualism. The most important difference between Hispanic and nonHispanic culture is conceptually closely related to the contrast between collectivist cultures and individualist cultures. There are numerous findings that fit this theoretical interpretation.

Collectivism-individualism is manifested at the psychological level as allocentrism-idiocentrism. The distinction is necessary, because it has been shown (Hofstede, 1980) that analyses at the level of culture do not correspond exactly to analyses at the level of individuals. For example, if we examine the responses of individuals from each culture, so as to obtain 20 data points, and then correlate these values across 50 cultures, the resulting pattern of correlations is not the same as that obtained by doing the correlation within culture, utilizing the responses of several hundred individuals from that culture. In other words, it can be the case that

allocentrics in collectivist cultures differ from allocentrics in individualist cultures.

We will preserve, then, the distinction by talking about the collectivism of Hispanic culture, and the allocentrism of Hispanics.

Allocentrism is a strong concern for identification with an ingroup while idiocentrism is characterized by independence from ingroups and self-reliance. In addition, allocentrics emphasize subordination of personal goals to the goals of the ingroup while idiocentrics see their personal goals as not necessarily related to the goals of the ingroup. There are many ingroups such as kin, friends, co-workers, neighbors, fellow nationals, and so on, so that there are many kinds of allocentrics (Hui, 1984). Collectivist cultures emphasize harmony within the ingroup, and ingroups regulate many social behaviors. Interdependence is considered an important value. Shame is the most important mechanism of control of social behavior and the ingroup is at the center of the psychological field. Finally, the self and the ingroup are extensions of each other.

In the case of individualist cultures there is more individual than ingroup regulation of behavior. Self-sufficiency is a great value. Confrontation within the ingroup is permitted., Guilt is the most important mechanism of control of social behavior and the person, rather than the ingroup, is at the center of the psychological field. Finally, the self is quite distinct from the ingroup.

The values emphasized by allocentrics are consistent with the above mentioned theoretical analysis. The data that we obtained from the project are also quite consistent. Thus, the cultural script of simpatia (Triandis, Marin, Lisansky & Betancourt, 1984), according to which Hispanics perceive positive behaviors as more probable and negative as less probable than do nonHispanics, is a reflection of the emphasis on harmony which is characteristic of collectivist cultures. Also, our data on role perceptions

(Triandis, Marin, Hui, Lisansky & Ottati, 1984) showed that the Hispanic family pulls its members (towards extreme interdependence) while nonHispanics are often ambivalent about their relationship with their family. NonHispanics often find many family relationships (e.g., father-son) too confining and controlling. By contrast, the Hispanics do not report overcontrol by high status family members. Furthermore, work roles are seen much more positively by nonHispanics than by Hispanics. Specifically, nonHispanics see more positive behavior (e.g., intimacy) within work roles than do Hispanics. The latter are quite ambivalent in their view of such roles. In other words, nonHispanics are attracted to both their family and work situations and somewhat more by work than by family roles whereas Hispanics are strongly attracted to family situations and they are quite ambivalent about work relationships. Thus, the family is perceived by the Hispanics as a protective cocoon; by nonHispanics as overprotective and confining.

Triandis (1981) reported the results of interviews, carried out by six Hispanic interviewers, with 88 Hispanic males, and responses of 46 nonHispanic males, concerning the way these subjects view the U.S. Navy. One of the findings was that the Hispanics expressed more concern that joining the Navy would result in their being missed by their families and being unable to meet their family obligations than was the case for the nonHispanics. Both of these findings are consistent with the central construct of allocentric behavior: Paying attention to the way one's own behavior affects others.

Rojas (1981) interviewed Hispanics at recruit centers in Texas, California, New York and Illinois. He found that many indicated that a Navy career is incompatible with their intense family attachments. Such views may account, in part, for the lower rates of Hispanic recruitment by the U.S. Navy.

In a study (Triandis, Ottati & Marin, 1982a) that investigated need for achievement, emphasis on hard work, and on competition, the factor structure of the items obtained from analyses of the responses of Navy Hispanics and nonHispanic recruits showed a Hispanic factor labeled "Avoidance of Interpersonal competition." This cooperative, non-competitive perspective is emphasized also in many other studies, such as those of Spencer Kagan, Ray Garza, and others too numerous to list here. Lisansky's (1981) review and the Triandis, Ottati and Marin, (1982a, 1982b) reports summarize these studies.

In a study of values (Triandis, Kashima, Lisansky & Marin, 1982), the nonHispanic Navy recruits emphasized the values honest and moderate. Note that these are individual attributes that have little direct relevance to others. The Hispanic Navy recruits emphasized the values sensitive, simpatico, loyal, respected, dutiful, gracious and conforming. The latter values appear to be more allocentric than the former.

In a study by Ross, Triandis, Chang and Marin (1982), which examined the opinions of Hispanic and nonHispanic Navy recruits, about a broad range of work-related values, the Hispanics emphasized the values of cooperation and help more than the nonHispanics.

Hispanics were found to be more willing to sacrifice themselves (e.g., sell their TV) in order to attend family celebrations involving second and third degree relatives than was the case for nonHispanic Navy recruits (Triandis, Marin, Betancourt, Lisansky & Chang, 1982). This suggests that the Hispanic family has a broader boundary and also it is characterized by a more intensive attachment of its members. Furthermore, the more acculturated the Hispanics the less familism they exhibited (Triandis, Marin, Betancourt & Chang, 1982). In other words, not only are the Hispanics more allocentric than the nonHispanics, but as they become more acculturated (as measured by length of residence in the U.S., liking for

English radio, TV and movies, and Anglo friends and co-workers) they become less allocentric.

There is nothing especially new about the argument that Hispanics are allocentric. In fact, Lisansky's (1981) content analysis of the literature states that "There is a relatively high level of agreement in the literature regarding the relational value orientation in Hispanic culture. Most authors stress two themes: individuality and a more collectivist orientation. Hispanic individuality is generally sharply distinguished from North American style individualism. It is usually defined as emphasizing an acceptance of the value and worth of each individual which is unconnected to socio-economic status or accomplishments. Dignity and respect are two closely related concepts. According to many authors, the individual in Hispanic culture is valued not because he is as good as everyone else but rather because he is essentially different and unique."

"At the same time, most authors emphasize that Hispanic culture is more collectivistic than Anglo American culture. The group and group membership are extremely important aspects of Hispanic life. Individuals are not expected to be autonomous and independent from others; rather, interdependence is stressed. Hispanics are frequently described as more socially embedded, more cooperative, less competitive, and more "other-oriented" than Anglos. Some authors draw attention to a basic gregariousness in Hispanic culture and a concomitant de-valuation of privacy. Some authors discuss Hispanic collectivism in terms of lineality; others call it "personalism."

It is likely that Hispanics in the U.S. are more idiocentric than the populations from which they come from because the very act of migration is associated with idiocentric tendencies. Migration implies leaving behind some major ingroup to find fortune in some other society. Evidence supplied by Forgas, Morris and Furnham (1982) concerning migrants to Australia shows

that migrants are more individualistic than middle-class Australians. Furthermore, we expect that the more acculturated the Hispanics the more idiocentric they will be. Evidence presented in Technical Report No. 15 is consistent with this prediction.

The greater allocentrism of Hispanics should be reflected in a number of other ways such as

- (a) greater emphasis on cooperation rather than competition,
- (b) emphasis on interpersonal relationships as an end rather than as a means to an end,
- (c) more external locus of control,
- (d) a greater role of demographic attributes in interpersonal perception, (what Parsons mentions as emphasis on ascribed rather than achieved attributes),
- (e) less experimentation with new life styles,
- (f) less insecurity, rootlessness and alienation, fewer divorces, and fewer suicides.

There is some evidence that supports each of these points.

3. Hispanics are higher in power distance. This dimension, identified by Hofstede (1980), characterizes cultures in which those who have power are seen to be extremely different from those who do not have power. In high power distance cultures those who have high status are expected to act in an authoritarian way and subordination to high status persons is considered "natural." We have data from several sources but particularly from the study of roles, that indicate that behaviors such as to discipline, criticize, control and obey are more acceptable to Hispanics than to nonHispanics. Furthermore, behaviors such as to argue with, disagree with, are less likely for a low status person as seen by Hispanics than nonHispanics. Finally, the more acculturated the Hispanics the less they are willing to accept discipline, criticism, and control, and the more they

are willing to argue and disagree within many subordinate roles (Triandis, Kashima, Shimada, Villareal, in press). In high power distance cultures, according to Hofstede (1980), managers give detailed instructions, and do not act in a consultative way; there is much social distance between supervisors and subordinates, the prevailing view is that people are lazy and must be supervised rather closely (theory X), but loyalty to the organization is often very high.

In low power distance cultures both superiors and subordinates are "people like me"; in high power distance cultures they are people of "a different kind." In high power distance cultures inequality is acceptable (everyone should know his place), freedom is threatening, power is a basic fact that is not disputed, the powerful try to look powerful, the underdog is blamed, and there is little faith in people. In low power distance cultures inequality must be minimized, freedom is welcomed, power must be made legitimate by the powerful being wise, charming, or lovable, the powerful hide their power, the system is blamed, and the powerless join with each other to oppose the powerful.

The Hispanic emphasis on respect for parents, and those who are older than oneself can be viewed as part of the same syndrome. Many authors, such as Henderson (1979), Kagan (1977), Madsen (1972/1967) and Rubel (1970), observe that respect in Mexican American culture is awarded primarily on the basis of sex and age. Achor (1978), Goodman and Beman (1968), Heller (1966) and others assert that the Mexican American family is organized in an age hierarchy where the older command the younger. Relations between brothers, according to Madsen (1972/1967), are determined by age: younger brothers are expected to show proper respect to older brothers. Achor (1978), Clark (1970/1959) and Romano (1960) discuss aspects of the devotion to and veneration of the elderly.

The importance of the age hierarchy in Puerto Rican culture is discussed by Díaz-Royo (1974), Landy (1959), Padilla (1964/1958) and others. Alum and Manteiga (1977) and Pérez (1980) discuss social differentiation by age in Cuban culture.

Pérez (1980) notes that the elderly are over-represented in the Cuban American population because of the age selectivity of Cuban immigration. Several authors, including Pérez (1980) and Szapocznik (1980) for Cubans and Landy (1959) for Puerto Ricans, discuss changing patterns of values and behaviors toward the elderly in the United States; older people generally feel that younger people are not acting with sufficient respect toward them. The extent of change in the U.S. context is difficult to estimate from the literature.

Inequalities of power tied to sex are also consistent with this dimension. It is fairly well-known that the Mediterranean, Iberian and Latin American cultures emphasize social differentiation by sex (Pescatello, 1973; Pitt-Rivers, 1966; Wagley, 1968). Sex roles, particularly traditional ones, receive a great deal of attention in the literature on Hispanics.

Two concepts are important for an understanding of the philosophical underpinnings of Hispanic sex roles. One is the myth or premise of male superiority (Díaz-Royo, 1974; Fox, 1973; Giraldo, 1972; Madsen, 1972/1967; Romano, 1960; Wagenheim, 1972; Wells, 1969). This notion contains the assumption of female inferiority and helps explain the need for the double standard of morality (Fitzpatrick, 1971; Fox, 1973; Landy, 1959; Lewis, 1964; Mintz, 1956; Moreno, 1971; Sada, 1973).

The second concept has to do with honor and shame and the fact that the male's status is linked to the "purity" of his females (Fox, 1973; Pitt-Rivers, 1966). The Hispanic double standard, according to Fox (1973) is an elaborate game played among men for the prize of the esteem of other men.

Hispanic sex roles are frequently discussed in terms of familial roles. The husband and father is usually described as the master of the house, the main authority, primary provider, and the one to whom respect and obedience is due (Clark, 1970/1959; Fitzpatrick, 1971; MacGaffey & Barnett, 1962; Mintz, 1956; Murillo, 1976; Padilla, 1964/1958; Rubel 1970; Wells, 1969). Women are generally described in terms of the ideal wife, one who is submissive, subdued, compliant, self-sacrificing and chaste; the proper domain for women is in the home (Achor, 1978; Clark, 1970/1959; Landy, 1959; Madsen, 1972/1967; Murillo, 1976; Padilla, 1956; Seda, 1973; Wolf, 1972).

Machismo or manliness as an ideal is discussed by authors of all Hispanic groups. Defined in various ways, it is a constellation of values, ideals and behaviors considered appropriate to the realization of manhood. An important element of machismo is the maintenance of the male's dignity and honor (Burma, 1970; Clark, 1970/1959; Fitzpatrick, 1971; Fox, 1973; Landy, 1959; MacGaffey & Barnett, 1962; Romano, 1960; Seda, 1958). The female counterpart to machismo, sometimes called marianismo or hembrismo is much less discussed in the literature.

Social differentiation by sex can be seen in the very different socializations which male and female children undergo (Achor, 1978; Diaz-Royo, 1974; Glazer & Moynihan, 1963; Landy, 1959; Mintz, 1966; Padilla, 1964/1958; Seda, 1958). Social differentiation by sex can also be seen in the often mentioned Hispanic tendency toward segregation of the sexes, both for children and adults; many accounts stress that both sexes spend a great deal of time in same sex groups (Achor, 1978; Clark, 1970/1959; Fox, 1973; Landy, 1959; Madsen, 1972/1967; Mintz, 1966; Rubel, 1965; Seda, 1958).

A number of authors suggest and describe changes in Hispanic sex roles in the United States, although some authors such as Fox (1973), Gil (1976) and Lewis, Lewis and Rigdon (1978), seem to suggest that the area of sex roles is a bastion of cultural traditionalism.

In our own study of the perceived consequences of various concepts, we found that Hispanics saw a strong link between the concept DIGNITY and "find others will be nice to you," while nonHispanics saw a lesser link between these concepts. Also, Hispanics saw that DIGNITY is not much linked with "find others take advantage of you," while nonHispanics were less sure that these two ideas are unrelated.

At a somewhat higher level of abstraction, the combination of Power Distance and Collectivism results in a syndrome that might be called "ingroup conformity." It is consistent with Díaz-Guerrero's (1982) comparison of Mexicans and North Americans. Díaz-Guerrero (1982) employed questionnaires with Mexican and U.S. samples and found, after factor analysis, that the Mexicans were more likely than the U.S. subjects to show (a) sex differentiation, (b) power distance, (c) positive attitudes toward virgins, (d) high evaluation of women who sacrifice themselves for their family, (e) large emphasis on harmony within the ingroup, and (f) high levels of respect toward ingroup authority figures. Furthermore, several of these dimensions correlated with Witkins' field dependence, a cognitive variable that is known to be the result of severe socialization in the family.

Díaz-Guerrero has been writing for several decades on the theme of the influence of culture on behavior. His cross-cultural research has been carried out mainly in Mexico and the United States.

Díaz-Guerrero (1967, 1973, 1977; Díaz-Guerrero & Lara-Tapia, 1972; Holtzman, Díaz-Guerrero & Swartz, 1975) conceptualizes culture in terms of "socio-cultural premises," the underlying system of rules and assumptions that shape human action. In 1967, he defined culture as:

...a system of interrelated socio-cultural premises that norm or govern the feelings, the ideas, the hierarchization of the interpersonal relations, the stipulation of the types of roles to be fulfilled, the

rules for the interaction of individuals in such roles, the where's, when's and with whom and how to play them.

A socio-cultural premise is (1967), "a statement, simple or complex, but it is a statement that seems to provide the basis for the specific logic of the group." According to Diaz-Guerrero, a socio-cultural promise is stronger and more enduring than an attitude. The shared promises equip individuals for easier intragroup communication and are, therefore, "a sine qua non for social living."

Diaz-Guerrero (1972) emphasizes the importance of examining the socio-cultural determinants of individual behavior. More recently, in 1977, he proposed, "that culture, as defined, can account for significant variance of bona fide psychological and other behavioral science dimensions."

Rogelio Diaz-Guerrero (1967; 1973; Holtzman, Diaz-Guerrero & Swartz, 1975) is perhaps best-known for his formulation and elaboration of the active-passive dichotomy. This dimension refers to the way that cultures (i.e., the members of cultures) handle stress. All cultures, according to Diaz-Guerrero, can be classed as either active or passive endurers of stress.

In 1973, Diaz-Guerrero stated that the concept of active and passive syndromes, "imply a specific cognitive style, reflecting sensitivity to and a preference for either an active (change physical and social environment) or passive (change yourself) adjustment to stress."

Active endurers of stress, according to Diaz-Guerrero (1967), want to confront and face problems head-on. He posits that they should value conflict, competition, action, aggressiveness, equality, individual freedom, opportunity, independence, informality, content rather than form, pragmatism, and guilt for using energy "just for fun."

Passive endurers of stress, on the other hand, try to overcome problems by changing themselves rather than the environment. They value harmony,

protection, dependence, cooperation, idleness, prescribed roles, and formality.

In several books and articles (Díaz-Guerrero, 1967, 1970, 1973, 1977; Peck & Díaz-Guerrero, 1967; Díaz-Guerrero & Lara-Tapia, 1972; Holtzman, Díaz-Guerrero & Swartz, 1975), Díaz-Guerrero proposes and provides evidence for his hypothesis that Mexicans are passive and want to avoid stress, and Anglo-Americans are active and want to face stress. Socio-cultural values in Mexico which underlie the passive syndrome (Díaz-Guerrero, 1967) include: "abnegation, obedience, self-sacrifice, submission, dependence, politeness, courtesy, all passive endurances." Americans, on the other hand, require an active approach (Díaz-Guerrero, 1976): "Life is lived best in constant activity...self-esteem decays if you are idle."

In Personality Development in Two Cultures (Holtzman, Díaz-Guerrero & Swartz, 1975) this comparison between Mexico and the United States is further elaborated and defined. According to the authors, the major personality dimensions related to contrasts between the two cultures are as follows:

1. Americans tend to be more active than Mexicans in their style of coping with life's problems and challenges.
2. Americans tend to be more technological, dynamic, and external than Mexicans in the meaning of activity within subjective culture.
3. Americans tend to be more complex and differentiated in cognitive structure than Mexicans.
4. Mexicans tend to be more family centered, while Americans tend to be more individual centered.
5. Mexicans tend to be more cooperative in interpersonal activities, while Americans are more competitive.
6. Mexicans tend to be more fatalistic and pessimistic in outlook on life than Americans.

The first dimension is the active-passive dichotomy. Other research, such as Cohen (1979), Heller (1966), Kluckhohn & Strodtbeck (1961), Madsen (1972/1967), Padilla (1964/1958), and Szapocznik et al. (1978a; 1978b; 1979; 1980), supports this assertion. Cohen's (1979) research on stress and health behavior among Central and South American immigrants to Washington, D.C. is particularly relevant because she attempts to refute the characterization of Latin Americans as passive endurers of stress. Cohen asserts:

Studies of conflict resolution in latin American cultures often emphasize the dynamics of resignation and conformity, rather than control of the self and mastery over difficult circumstances. Resignation is, however, only one of the behaviors which can result from an ideal that leads to containment and suppression of feelings.

Controlarse has two complementary dimensions. Latinos can contain their feelings and either resign themselves to their unkind fate or strive to overcome stress-inducing situations. Among the immigrants in this study, there was an emphasis on the practice of sobreponerse, the ability to conquer and overcome one's disturbing feelings...(p. 269).

Cohen appears to be discussing a process of internal adaptation very similar to that posited by Diaz-Guerrero. What seems to be at issue here is the word "passive."

Holtman, Diaz-Guerrero and Swartz (1975) state that the second dimension - Americans tend to be more technological, dynamic, and external than Mexicans in the meaning of activity within subjective culture - is related to the active-passive dimension and is supported by research with the Semantic Differential. Activity, the authors assert, has different meanings for Americans than for Mexicans; they note that Mexican children saw less movement in the Holtzman inkblots and that time passed more slowly for Mexicans.

The second dimension is also supported by a portion of the literature which characterizes Hispanics as favoring value orientations of subjugation-to-nature (versus mastery-over-nature) and being (versus doing) (see Lisansky, 1981). For example, Heller (1966), Kluckhohn and Strodtbeck (1961), Mead (1953), Meier and Rivera (1972) and Saunders (1954) all claim that Mexican Americans prefer a being orientation toward activity.

The third dimension - Americans tend to be more complex and differentiated in cognitive structure than Mexicans - is linked by the authors to research on field-independence and field-dependence. Again, a certain portion of the literature on Hispanics (Lisansky, 1981) supports this assertion. For example, Ramirez (1976), who reviewed studies on field-independence and dependence with Mexican Americans, concludes that Mexican Americans are generally more field dependent than Anglo Americans.

The fourth dimension - that Mexicans are more family centered than Americans - also is supported by the majority of the literature on Hispanics (Lisansky, 1981).

The fifth dimension - that Mexicans tend to be more cooperative while Americans are more competitive - is also supported by other research findings (Lisansky, 1981) but not conclusively so. For example, Kagan and Madsen (1971) found that in tasks requiring cooperation, Mexican children did best, Mexican American children did second best and Anglo American children did worst. McClintock's (1976) research also indicates that Anglo American children are more competitive than Mexican children. Kagan (1977), in a review of all psychological work on this subject done between 1970 and 1977, concludes tentatively that the evidence suggests that Mexican American children are indeed more cooperative and they are oriented toward greater group enhancement and/or altruistic motives than are Anglo American children.

The sixth dimension - that Mexicans are more fatalistic and pessimistic than Americans - is also supported by a good portion of the literature on Hispanics (Lisansky, 1981), although there is also some disagreement as well. Many researchers on American Hispanics discuss fatalism, such as Heller (1966), Landy (1959), Madsen (1972/1967), Manners (1956), and Padilla (1964/1958). A number of psychological studies, however, have cast doubts on the assertion that Hispanics are fatalists. Garza and Ames (1976) data on locus of control found Mexican Americans to be less external on their total scores than Anglos. Garza (1977), in a review article, notes that sometimes Mexican Americans score high on externality and sometimes they do not. In a recent article by Cole, Rodriguez and Cole (1978) entitled "Locus of Control in Mexicans and Chicanos: The Case of the Missing Fatalist," the authors report that the proposition linking fatalism to external locus of control was not supported; neither the Mexicans or the Mexican Americans tested were significantly more external than Anglo Americans, and in fact, the Mexican subjects were the most internal of all subjects in four countries.

Other research by Diaz-Guerrero and his associates is also related to the active-passive syndromes. In 1967, a comparative study of the meaning of "respect" in Mexico and the United States, concluded: "The American pattern (of the meaning for "respect") was a relatively detached, self-assured equalitarianism. The Mexican pattern was one of close-knit, highly emotionalized, reciprocal dependence and dutifulness, within a firmly authoritarian framework."

A number of studies deal with sex roles. Diaz-Guerrero and Lara-Tapia (1972) compared Mexican children of both sexes using the Holtzman Inkblot Technique and concluded: "Mexican men are more active than Mexican women, in the same way that North Americans are more active than Mexicans." In 1973, Diaz-Guerrero offered partial support for the following hypotheses:

1. In Mexican culture women are more passive than men;
2. Younger children in Mexico are more passive than older children;
3. Lower-class children are more passive than upper-class children.

He also notes that these statements are also generally true for the world at large. Diaz-Guerrero further speculates that a "male coping style" is related to the rate of increase of industrial production, and he sees an active philosophy of life as characteristic of highly industrialized countries. In 1974, in a study conducted by Laosa, Swartz and Diaz-Guerrero comparing Mexican and American children, the authors found that there was a greater stress in Mexican culture on sex role differentiation which "reflects the 'machismo' of traditional Mexican culture."

Related to this abstract syndrome, also, may be the finding that Puerto Ricans are somewhat more concerned than Anglos with the link between accidents and death (Pacheco & Lucca-Irizarry, 1983). If one is concerned about his role in the family, and if there are accidents that may remove one from that role, such concern may be understandable. In other words, the Puerto Rican is not only concerned with his own survival, which is also true for the Anglo, he is also concerned with the survival of his activities within the family, since he feels a much stronger sense of duty about these activities than does the corresponding Anglo subject.

4. Navy career structures differ for Hispanics and nonHispanics.

Rojas' observations (Technical Reports Nos. 4, 22, and 23) indicate that nonHispanics have a better understanding of what they need to do in order to make progress within the Navy than is the case for Hispanics. Furthermore, Hispanics find the Navy classification process particularly baffling. They do not know what the particular jobs that are being described to them are all about, and they have difficulties understanding what the classifiers are telling them. Much more explanation needs to be given to Hispanics

concerning what is expected and how one can get from one job to another, than is done now by the Navy.

3. What Variations in Culture are Traceable to Hispanic Subgroups?

The data that we collected from the Hispanic and nonHispanic Navy recruits did not indicate any important, reliable differences among the various Hispanic groups--Mexican, Puerto Rican, and Cuban background. However, this statement must be qualified in a number of ways. First, as mentioned above, Hispanic recruits are atypical Hispanics. They are more like nonHispanics in a number of demographic variables than like the bulk of the Hispanic population. They are generally quite acculturated. Second, acculturation has the effect of converging the various Hispanic subgroups toward the nonHispanic culture. Thus, whatever differences there might have been in the original subcultures, from which these samples did come, they were diminished by the acculturation process. Third, the major findings, such as the differences between Hispanics and nonHispanics on collectivism and power distance are shared by the Hispanic subgroups, so that these variables will not be a basis for contrast among them. Fourth, while in some cases we did obtain some differences with one of our research methods, we were not able to confirm them with any other method, and our considered opinion is that the Navy should not take action on the basis of differences that have not been confirmed by more than one method. For example, some observations made by Rojas were not confirmed by any of our interviews, questionnaires or other studies, so we do not know how reliable they are.

Finally, differences between the Hispanic subgroups may be due to variables such as (a) level of acculturation and (b) social class. It must be remembered that a large proportion of Mexican-background Hispanics have been in this country for over one hundred years, and thus are thoroughly acculturated; by contrast the majority of the Cubans are relative newcomers (post Castro). The Puerto Ricans have a strongly Hispanic culture in Puerto

Rico and only when they come to the mainland do they meet the nonHispanic U.S. culture. As a result, the Mexicans are most acculturated and the Puerto Ricans least acculturated. Furthermore, the social class distributions among these groups are quite different, with the Cubans more likely to be middle class, many of the recent immigrants from Central America more likely to be upper class, while the bulk of the Mexican and Puerto Rican recent immigrants were lower class. Since the mainstream American culture, due to the large diffusion of education and wealth, tends to be predominantly middle class, there are similarities between the nonHispanic culture and the various subgroups that can be explained by the time of immigration and the social class variables. Specifically, the differences that were identified by Szalay (1985), on the "psychocultural" dimensions measured by Associative Group Analysis, can be understood by consideration of these two variables. He found that Anglo-Americans were quite close to Mexican-Americans, moderately distant from New York Puerto Ricans and Florida/New Jersey Cubans, and quite distant from Puerto Ricans in San Juan, Mexicans in Mexico City, and from Columbians. Clearly, the Mexican-Americans are the most acculturated; the Puerto Ricans in New York are somewhat acculturated; the Cubans are not as acculturated as the Puerto Ricans but they are more likely to be middle class, so that the result is that they are as distant from the Anglo-Americans as the New York Puerto Ricans. Finally, the samples that are not acculturated show the most distance.

Szalay's (1985) results are interesting also because he shows the correlations in the frequencies of the responses given by the various samples. For example, the New York Puerto Ricans correlated on the average .47 with the Anglos, while the Mexicans from Mexico City correlated with the Anglos only .13. Furthermore, he shows that the longer the service in the

Navy the more convergence there is between the Anglo data and the Hispanic data.

Added to our caution about emphasizing differences among the Hispanic subgroups is the concern with individual differences within subgroups. Taking all that into account, our recommendation is that the Navy not pay attention to such subgroup differences until further research provides more information about them.

4. What is Common and Culture-Specific for Hispanics and nonHispanics?

It is useful to state one more time what is common and culture-specific in our findings.

Common

We found that Hispanic and nonHispanic recruits were similar in their self-concepts, values, social attitudes, levels of achievement motivation, the acceptability of social behaviors, attributions of success and failure and affective meaning of key concepts. They were also similar in internal locus of control, although studies with representative samples of Hispanics have found Hispanics to be more external than Anglos. Thus, given the atypical nature of Navy Hispanics, we found that Hispanics and nonHispanics have a great deal in common.

Culture-Specific

The major differences between Hispanic and nonHispanic cultures were on collectivism and power distance. These attributes were found to distinguish not only the Hispanics from the nonHispanics in the Navy, but also in high school samples (Technical Report No.ONR-29), thus giving us more confidence in the generality of the findings.

5. How Can Hispanic Culture be Placed in a Broader Framework of Cultural Differences?

A number of attempts to provide a broad framework for understanding cultural differences have been published in recent years. For example,

Hofstede (1980) uses four dimensions to contrast cultures. His most important dimension, Power Distance, is one that contrasts Hispanics and nonHispanics very clearly. In Hofstede's work the top indices of power distance (on a 100-point scale) were obtained in the Philippines (93), Mexico (81), and Venezuela (81), all linked to Hispanic culture. The lowest levels (Austria 11, Israel 13, Denmark 18) can be used as a contrast anchor. The U.S. was at 40. However, our own data, using Hofstede's items, showed that the mean power distance of the Hispanic Navy recruits was 114 and of the nonHispanic recruits 117 (Technical Report No. 11, p. 14). In other words, in a military setting one is expected to have high power distance, and the military apparently have an organizational "culture" where power distance is higher than in industrial organizations anywhere in the world.

Note that the scores of the Hispanic and nonHispanic recruits, using Hofstede's items, are not significantly different from each other. However, that is probably due to the particular Hofstede items, which make this scale insensitive to cultural differences at very high scale values. Specifically, one of the three items of the scale was concerned with whether in one's organization a subordinate is likely to argue with a supervisor. Such behavior is unlikely in the military. As a result, the power distance scores of recruits are extremely high, and it is known, on psychometric grounds, that scales do not discriminate well at their most extreme ranges. Though the Hofstede items did not indicate differences between Hispanics and nonHispanics, many of our other measures, particularly the role differentials, provided ample evidence that Hispanics are higher than nonHispanics in power distance.

The second dimension of Hofstede's study was uncertainty avoidance. Societies high on this dimension (Greece 112, Portugal 104, Belgium 94, and several Latin American countries 76-87) are characterized by a need for certainty, security, rules and norms. Societies low on this dimension

(Singapore 8, Denmark 23, Sweden 29; the U.S. 46) have lower needs for certainty. Our Hispanic recruits had levels of uncertainty avoidance comparable to the levels of our nonHispanic recruits. Both groups were close to the U.S. mean, though slightly higher than it (54).

On the third Hofstede dimension, collectivism, the cultures with the most extreme scores were Venezuela (12) and Colombia (13) while the U.S. was the most individualistic culture (91) followed by Australia (90), and Great Britain (89). Our Navy recruits were close to the U.S. mean, though the Hispanics were more collectivist than the nonHispanics.

The fourth Hofstede dimension, masculinity, deals with assertiveness versus nurturance. Cultures high on assertiveness (Japan 95, Austria 79, Venezuela 73) contrast with cultures that emphasize nurturance (Sweden 5, Norway 8, Netherlands 14). The U.S. with a score of 62 was relatively assertive. The Navy samples with a score of 46 for the Hispanics and 39 for the nonHispanics were somewhat nurturant, with the nonHispanics even more nurturant than the Hispanics. Again, given that the most common culture of origin of our Hispanics (Mexico with 69) is high on this attribute, the Hispanic recruits are understandably higher than the nonHispanic. However, possibly because of their young age, the recruits tend to be on the nurturant side, relative to the U.S. mean. Hofstede reports that low levels on this dimension are associated with a "people orientation" emphasis on the quality of life, service as an ideal, the belief that small is beautiful, and fluid sex roles, all of which are linked to the younger segments of the U.S. population, in the 1980s.

6. Implications of our Findings for the Navy

In this section we will discuss the implications of our findings for the recruitment, placement, training, and career management of Hispanics in the Navy.

Recruitment

The collectivism of Hispanic culture works against recruitment in the Navy, because the separation from the family, the concern that one may not be able to fulfill family roles and the high uncertainty avoidance among Hispanics are barriers to recruitment. However, if the family is a barrier, it can be turned to an advantage if Navy recruiters could convince the family about the desirability of a young man joining the Navy. The implication, then, is that the Navy must utilize community-based organizations to reach Hispanics. Also, advertising directed at the family, and emphasis on walk-in recruitment coordinated with such advertising ought to be helpful. The last point is also supported by Braddock and Crain's (1985) analysis.

Findings reported by Rojas suggest that the barrio includes many young men who would be excellent prospects for the Navy, provided they had the requisite skills. If the Navy could provide such skills--language training, cultural training, basic technical skills--"on location" it would have a high probability of drawing recruits from that setting. Rojas observed (see above for details) that the current Hispanic Navy recruits are more acculturated than the bulk of the Hispanic population. If the training that has just been mentioned were to facilitate acculturation, the Navy would tap a completely new pool of talent. Such training would have to include a substantial component of learning how to deal with bureaucracies (educational, industrial, military, etc.). Hispanics, according to Rojas, are quite uncomfortable with bureaucracies. The essence of "personalismo" is that one deals with people one knows. Hispanics simply have fewer skills for dealing with people according to their roles. They focus on the person who is playing the role. They do not understand the idea of equal treatment, the application of the principles of equity (more pay for greater contributions), the idea that one progresses from one job to a more

important job, and the idea that if one learns a job in the Navy one can do a similar job in the civilian economy. All of these ideas have to be introduced in the training. Thus, our strong recommendation is that the Navy develop a "culture assimilator" for understanding the Navy culture. One needs to know the ropes: how does one get things done in the Navy. One needs to have skills and knowledge that permit one to be comfortable with bureaucracies. Such an assimilator would focus on how bureaucracies work, why one needs to have bureaucracies, and would include an attempt to change attitudes toward bureaucracies, from negative to positive.

The need for the training advocated above is especially clear when one observes demographic trends in the U.S. (Estrada, 1985). As Estrada has pointed out, the decline in the youth population as a whole is already evident. This decline will continue until about 1993, with an upward trend to become evident by 1999. Minority youths will be an increasing proportion of the youth population. The military will have to compete with colleges and industrial employers for the smaller pool of young men. Thus, the military will have to do something to reach the less acculturated Hispanics and provide them with the training they require to join the Navy.

Providing such training in the barrios will also overcome a philosophic objection to dealing with minorities differently than with the rest of the Navy recruits, within the Navy. If those who join are already highly acculturated, the Navy can deal with all newcomers equally.

Hispanics, as Rojas (1982, 1983) sees it, are of two kinds: (a) Those who really think of themselves as Mexicans, Puerto Ricans, etc. who happen to be in the U.S.; they would not want to join the Navy unless it provided overwhelming material advantages, and (b) those who want to be assimilated in the U.S. mainstream and keep only language, and family relationships in the Hispanic mode. The former are unlikely to join the Navy. The latter, when they join, often want to forget that they are Hispanics.

Rojas also argues that Hispanic recruitment and retention in the Navy would be higher if the Navy had Hispanic umbudsmen who provided personal contact with the recruits, both during the recruiting and the training phase of the process of joining the Navy.

He also argues that life on vessels involves unusually intensive work-related interactions, tremendous physical proximity and lack of privacy, which clashes with the usual pattern of Hispanic interactions which is intensively family-related.

Finally, there are very few Hispanic Navy officers, and the ones who have Hispanic names do not view themselves as Hispanics. By contrast, there are many Black and Filipino officers. Also, at levels beyond E4 there is a difference in the distributions. Rojas counted at those levels 18% Black, 14% Filipino but only 3% Hispanic. Thus, there are not enough role models for Hispanic recruits.

Placement

The classification of Hispanic recruits in Navy jobs appears to be a major problem. According to Rojas, who observed the process, the recruit is given a few minutes to decide among several jobs, while the classifier talks in rapid English and mentions a few of the attributes of these jobs. The lack of English, the lack of knowledge of Navy jobs, and the mysteries associated with dealing with bureaucracies combine to make the classification process unsatisfactory for the Hispanic recruits. In fact, Rojas' account seems to suggest that the informational basis available to all recruits may be too limited, but it is particularly limited for the Hispanic recruits.

Again, training may be required to overcome this problem. Such training might consist of allowing recruits to "play with a computer" that has in it substantial chunks of information about varieties of Navy jobs, clusters of such jobs, requirements as determined by job analysis, personnel

specifications, criteria for performance appraisal, and career paths available within the Navy and from Navy jobs to civilian jobs. Such computer training could be used to introduce the recruit to a variety of Navy jobs, and also to indicate current Navy priorities for particular jobs that the particular recruit may be able to do. If such training were used before the recruit met with the classifiers, it is likely that the short times available for discussion with the classifiers would be used more intelligently by the recruits.

While such training would be helpful to all Navy recruits, it would be particularly helpful to Hispanic recruits, who have some difficulty with rapid reading. While "playing with the computer" the Hispanic recruit may take a little longer to read the information, and that will not be noticed by the others, so that the recruit will not be embarrassed.

Training

We have already discussed the need for training to increase the acculturation of Hispanics into the Navy culture. This can be done either at the level of the barrío, or after joining the Navy. Part of the acculturation to the Navy would include "understanding" nonHispanic culture. Again, culture assimilators would be helpful. Understanding the difference between collectivism and individualism, high and low power distance, and the like should help a Hispanic become more comfortable in the new environment.

The aim of such cultural training is to make the Hispanic capable of behaving effectively in both his culture and the Navy culture. The training should not be directed toward eliminating Hispanic culture, but toward adding the skills needed to perform effectively in the nonHispanic culture (Triandis, 1976). Philosophically it is like language learning--if one learns English, it does not mean that one should unlearn Spanish. Clearly, unless that philosophic stance is adopted, there will be resistance by the Hispanic community to the training.

Career Management

Navy authorities must become aware of some of the attributes of Hispanic culture, so that when dealing with Hispanics they might be able to take those attributes into account.

Job assignments. Hispanics will prefer jobs where they can receive social support from other Hispanics or Navy personnel who can deal with them cooperatively, and with an emphasis on harmony.

Job autonomy is not as important an attribute for Hispanics as for nonHispanics. However, jobs where cooperation rather than competition is emphasized should be preferable for Hispanics than nonHispanics. Group incentives may be more acceptable to Hispanics than to nonHispanics.

Desirable supervisor behaviors. Supervisors of Hispanics may be particularly effective if they are high in consideration as well as initiating structure. Treating subordinates with dignity and respect is particularly important for this cultural group. In dealing with subordinates, emphasis on need and equality, is desirable; if equity is to be used, some explanation (e.g., this is Navy policy) may need to be provided so the subordinate understands the basis of the decision.

Hispanics do not expect individual participation in group decisions or in group goal setting. In fact, they may be uncomfortable with supervisors who do not know precisely what they want done. Hispanics will be quite responsive to shame, and not quite as likely to be guided by guilt. This has implications for punishment: it will be more effective if group-centered than if based on appeals to abstract principle.

Hispanics will appreciate supervisors who are conservative, give clear directions, and take care of their subordinates. Thus, supervisors may find that with Hispanics they can be more structured but they must also be more helpful than they are with nonHispanics. They should offer to help with personal problems. If a Hispanic fails, he may attribute the failure to

having been given the wrong assignment. Insensitivity to that attribution for failure could cause misunderstandings between the Hispanic and his supervisor.

Placement within social group. Eitelberg (1985) presents evidence that Hispanics have trouble adjusting. Specifically, he notes that Hispanic military discharges tend to be in the "early release" category and among Puerto Rican there is a frequent psychotic diagnosis (the 1983 data show that 35% of Hispanics compared to 19% of whites are treated and discharged with psychotic diagnoses). This condition may be precipitated by lack of proper placement in a group, because social support sometimes acts as a moderator of stress and reduces the probability of psychotic episodes. Eitelberg also notes that the proportion of Hispanics on active duty who are married and have dependents is noticeably higher than the comparable proportions for blacks and whites. If that observation is considered together with the report titled The Veterans Attitude Tracking Study--1983 (published by the Science Center, Philadelphia, PA) which reported that veteran men and women with "positive propensity" to "Active Forces" are more likely than those with "negative propensity" to be unaware of their father's education, not be homeowners, be a member of a racial or ethnic minority, and single, we may identify a clue to the problem. The four attributes just mentioned, while on the surface constituting unrelated facts, appear linked to the abstract concept of "low level of integration to a larger society." Other data, in the same report, show that those with positive propensity are less well integrated into the civil labor market, and those who are married have lower levels of positive propensity. One can then extrapolate that Hispanics who come from a collectivist culture, where there is considerable integration into a social group, and who are married, will find relationships with people with a low level of integration and who are not married, rather difficult. Obviously, this is a hypothesis, since it has

not been tested explicitly in this project's research, but it may provide an important clue concerning the large rates of maladjustment among Hispanics.

Eitelberg's data also suggest that after this initial period, Hispanics have lower attrition rates than whites and blacks. Some particular subpopulations (e.g., Mexican Americans) have particularly low attrition rates. This may be due to the fact that Mexican Americans tend to be more acculturated than the other groups of Hispanics. Thus, if the Navy could provide the training and the conditions that will allow Hispanics to become comfortable in the Navy, for an initial short time period, the chances are that they will remain with the Navy.

7. Scientific Value of Project

The publications that were supported by the project can be divided into those that made a theoretical and those that made a methodological contribution to the scientific literature.

Theoretical Contributions

The major theoretical accomplishments are centered around a better understanding of the concepts of individualism and collectivism. A review of the literature (Triandis 1983b, 1985), an exploration of the conceptions of social scientists around the world (Hui & Triandis, in press, b), and the placement of the collectivism-individualism dimension into a broad theoretical framework of cultural differences (Triandis, 1983b; 1984; Triandis & Brislin, 1984; suggested that intensive explorations of this dimension are likely to lead to important advances in cross-cultural psychology. Deep probes of the collectivism concept (Triandis, Marin, Lisansky & Betancourt, 1984; Triandis, Marin, Hui, Lisansky & Ottati, 1984) showed that a number of theoretically stated elements of the construct can be supported by empirical investigations.

The extraordinary importance of understanding the role of individualism in social behavior can be gauged from the fact that it can be linked to

heart attack rates, reduction in the effectiveness of the immune system (hence higher rates of cancer, etc.), suicide rates, drug abuse rates, delinquency rates, homicide rates, divorce rates, child abuse rates, accident rates, and mental illness rates (Henry & Stephens, 1977; Hsu, 1983; Naroll, 1983). While these links are only suggestive, and an enormous amount of empirical work is required to establish them firmly, individualism versus collectivism may well prove one of the most important constructs of cross-cultural psychology. This project has put the scientific study of this construct firmly on the map.

Furthermore, the development of precise methods for the measurement of the construct (Technical Reports Nos. 30, 31, 33) has implications for further research. It will make the testing of the hypotheses developed by Hsu (1983), Naroll (1983) and Triandis (1985) feasible. Also, by examining the multidimensional character of the construct, and by providing measurement methods for each of its dimensions, it will make possible answers to numerous scientifically important questions that have major societal implications.

We already know (Triandis, 1985) that individualism is linked with positive attributes of cultures such as better government, high levels of achievement, and economic development. Thus, by dissecting the construct and finding which of its aspects are essential for the positive outcomes (e.g., achievement) and which are strongly linked to its negative aspects (e.g., loneliness) it will be possible to provide information about the configurations of various aspects of individualism that provide different kinds of social outcomes, and thus allow public policy choices. By linking the construct to child-rearing patterns, school and educational policies, one should be able to show what directions might be desirable in public policies. Finally, by showing that the construct restricts the range of

applicability of equity theory (Technical Report No. 32), we have provided insights on the limitations of key social psychological theories.

In addition, Triandis, Hui, Albert, Leung, Lisansky, Diaz, Plascencia, Marin, Betancourt and Loyola (1984) developed an approach to the study of culture that utilizes individual models of social behavior. These models involve idiographic analyses, which appear quite relevant to the concern of personologists. Also, by identifying similarities across individual models it is possible to identify cultural differences. This study made a contribution to the debate among anthropologists, concerning whether culture is "in the mind of the members of the culture" (realists) or in the "mind of the investigator" (nominalists). By finding common elements in the models of social behavior among those who share a culture, the point of view of the realists was supported. However, full interpretation of the findings required extraneous information, available to anthropologists, thus supporting the point of view of the nominalists. Thus, both points of view were supported, but this empirical study indicated the extent and the reasons for the support of each position.

Finally, Hui (1982) reviewed 70 reports of cross-cultural research with the locus of control construct, and showed that the construct can be used in a broad range of cultures although its measurement requires special adjustments that take the culture into account.

Methodological Contributions

One of the key questions of cross-cultural psychology is whether one must develop instruments that reflect local conditions (emic) in each culture. Triandis and Marin (1983a) showed that while the emic development of instruments is time consuming and expensive it is justified because it identifies more cultural differences than the pseudoetic (taking an instrument developed in one culture and using it in another assuming that it is appropriate, i.e., assuming that it measures a universal construct).

However, the same study showed that the pseudoetic approach can identify cultural differences if they are strong enough, e.g., the simpatia script among Hispanics. In other words, for a rough approximation, and if one is only interested in the major differences between cultures, the pseudoetic approach has some utility. Thus, it becomes more a matter of the purpose of the research rather than an absolute prohibition of the pseudoetic approach, whether one should or should not invest in emic instruments.

Another major issue of methodology concerns the equivalence of measurement. Equivalence can be established at the level of the function (e.g., rice and bread may be said to be equivalent for the East and West), at the level of the constructs (i.e., a good translation), at the level of the scales (e.g., by showing that the scale has similar antecedents and consequents in the several cultures), and at the level of the metric (by showing that the numbers obtained in each culture mean the same thing in the various cultures). Each kind of equivalence requires different levels of methodological sophistication, makes different assumptions, and requires different tests, outlined in Hui and Triandis (1983). Item response theory can provide a good approach to equivalence (Hui, Drasgow & Chang, 1983).

Another major issue of cross-cultural psychology is translation. Here the problem is how to utilize bilinguals. It turns out that bilinguals responding to translation-equivalent instruments give different responses. How come the same person when he answers in Spanish gives one answer and when he answers in English gives another? Three hypotheses have been proposed: (a) a Hispanic gives a more socially desirable answer in English than in Spanish, since the reference group of each of the languages is different. In Spanish he is telling other Hispanics how he feels; in English he is telling Anglos how he feels, and he better present himself in the most favorable light; (b) there is ethnic affirmation, that is an emphasis on one's own values and positions. So the Hispanic gives an even

more Hispanic answer in Spanish than in English. The argument has been that on some items, that are very central to identity, ethnic affirmation is likely to occur. If one is Catholic one feels good when, so to speak, one is more Catholic than the Pope, on some issues; (c) accommodation occurs when in English the Hispanic gives the kind of answer he thinks the nonHispanics are likely to give. The argument has been that on issues that are not central to one's identity, this is likely to happen. The study by Marin, Triandis, Betancourt and Kashima (1983) examined these possibilities. There was massive evidence for social desirability, but also there were a few issues on which the other two patterns were identified.

Still another issue is how to deal with the variable of acculturation. First, one needs to measure it. Triandis, Kashima, Hui, Lisansky and Marin (1982) developed a factorially complex procedure for the measurement of both acculturation and biculturalism. That index proved very useful. It correlated systematically with a number of variables. Triandis, Kashima, Shimada and Villareal (in press) showed that for role perceptions and behavioral intentions the more acculturated the Hispanics the more they give answers that converge with the answers of nonHispanics. But for stereotypes the opposite was found.

In fact, for stereotypes there is a phenomenon that was called the "ping-pong effect." Those who were moderately acculturated were similar to the nonHispanics, but those who were highly acculturated were more dissimilar from the nonHispanics than the least acculturated Hispanics. It is as if the moderately acculturated attempted to move toward the point of view of the nonHispanics and were rebuffed, so they went back toward their original viewpoint, but overshot it, so that the gap between the most acculturated and the nonHispanics was maximal. The fact that this occurred only for stereotypes may be theoretically important. Triandis and his associates argued that on role perceptions and behavioral intentions, for

which massive evidence shows that they are linked to actual behavior (see Fishbein, 1980; Triandis, 1980), it is difficult for the Hispanics to move away from the point of view of the nonHispanics, who are the majority of the population because their behavior is shaped by reinforcements provided by the majority. But, on stereotypes there is no such link with overt behavior. The person can fantasize with immunity that his own cultural group has highly desirable traits. So, the more the nonHispanics hold non-positive heterotypes of Hispanics the more do the Hispanics move away from the nonHispanic point of view. The more acculturated Hispanics know more clearly the point of view of the nonHispanics and so they move more reliably away from it.

General issues of measurement across cultures were outlined by Hui and Triandis (1985). Particular problems, such as distortions introduced by the use of bipolar scales (Triandis & Marin, 1983b), the instability of response sets (Hui & Triandis, in press, a), and the dissection of stereotypes by separate measurement of uniformity, intensity, direction and quality (Triandis, Lisansky, Setiadi, Chang, Marin & Betancourt, 1982) were also discussed in some of the publications supported by the project.

8. Conclusion

The project has resulted in theoretical, methodological, and applied benefits. The previous section outlined the theoretical and methodological benefits. The section on implications for the Navy, the applied benefits.

Assessing of these benefits obviously reflects one's values. For this author the initiation and establishment of the topic of individualism-collectivism, as a serious area for research in cross-cultural psychology is the most significant. Already, numerous other investigators (e.g., Bond et al, 1985; Forgas & Bond, 1985) have begun the systematic exploration of the implications of this dimension for social behavior, and there is a strong

probability that this will become a major new horizon of cross-cultural psychology.

References

- Achor, S. C. (1978). Mexican Americans in a Dallas barrio. Tucson: University of Arizona Press.
- Alum, R. A., & Manteiga, F. P. (1977). Cuban and American values: A synoptic comparison. In Hispanic subcultural values: Similarities and differences. Mosaic (ERIC ED 144466).
- Bond, M. H., Wan, K., Leung, K., & Gicalone, R. A. (1985). How are responses to verbal insult related to cultural collectivism and power distance? Journal of Cross-Cultural Psychology, 16, 111-127.
- Braddock, J. H., & Crain, R. L. (1985). Career patterns. In H. W. Sinaiko, P. M. Curran, B. T. King, & J. M. Schneider (Eds.), Hispanic subpopulations and Naval service (Tech. Rep. SI/MRAS/TR-11) (pp. 11-13). Washington, DC: Office of Naval Research.
- Burma, J. H. (1970). Mexican-Americans in the United States: A reader. Cambridge, MA: Schenkman.
- Clark, M. (1970/1959). Health in the Mexican-American culture: A community study. Berkeley, CA: University of California Press.
- Cohen, L. (1979). Culture, disease, and stress among Latino immigrants. Washington, DC: Research Institute on Immigration and Ethnic Studies, Smithsonian Institute.
- Cole, D., Rodriguez, J., & Cole, S. (1978). Locus of control in Mexicans and Chicanos: The case of the missing fatalist. Journal of Consulting and Clinical Psychology, 46, 1323-1329.
- Diaz-Guerrero, R. (1967). Sociocultural premises, attitudes and cross-cultural research. International Journal of Psychology, 2, 79-88.
- Diaz-Guerrero, R. (1970). Personality development of Mexican school children: A research project. Revista Interamericana de Psicologia, 4, 255-260.

- Diaz-Guerrero, R. (1972). A factorial scale of historic-socio-cultural premises of the Mexican family. Revista Interamericana de Psicologia, 6, 235-244.
- Diaz-Guerrero, R. (1973). Interpreting coping styles across nations from sex and social class differences. International Journal of Psychology, 8, 193-203.
- Diaz-Guerrero, R. (1976). Test anxiety in Mexican and American school children. In C. D. Spielberger & R. Diaz-Guerrero (Eds.), Cross-cultural anxiety. Washington, DC: Hemisphere.
- Diaz-Guerrero, R. (1977). A Mexican psychology. American Psychologist, 32, 934-944.
- Diaz-Guerrero, R. (1982). The psychology of the historic-sociocultural premise, I. Spanish Language Psychology, 2, 383-410.
- Diaz-Guerrero, R., & Lara-Tapia, L. (1972). Sexual differences in personality development of Mexican school children. Revista Latinoamericana de Psicologia, 4, 345-351.
- Diaz-Royo, A. T. (1974). The enculturation process of Puerto Rican highland children. Doctoral dissertation. Ann Arbor, MI: University Microfilms, #BFJ 75-12506.
- Eitelberg, M. J. (1985). Historical data on Hispanics in the U.S. Military. In H. W. Sinaiko, P. M. Curran, B. T. King & J. M. Schneider (Eds.), Hispanic subpopulations and Naval service (Tech. Rep. SI/MRAS/TR-11) (pp. 6-10). Washington, DC: Office of Naval Research.
- Estrada, L. (1985). Demographic overview of Hispanic America. In H. W. Sinaiko, P. M. Curran, B. T. King & J. M. Schneider (Eds.), Hispanic subpopulations and Naval service, Tech. Rep. SI/MRAS/TR-11) (pp. 4-6). Washington, DC: Office of Naval Research.

- Fishbein, M. (1980). A theory of reasoned action: Some applications and implications. In H. E. Howe & M. M. Page (Eds.), 1979 Nebraska symposium on motivation. Lincoln, NE: University of Nebraska Press.
- Fitzpatrick, J. P. (1971). Puerto Rican Americans (The meaning of migration to the mainland). In M. M. Gordon (Ed.), Ethnic groups in American life series (pp. 251-257). Englewood Cliffs, NJ: Prentice-Hall.
- Forgas, J. P., & Bond, M. H. (1985). Cultural influences on the perception of interaction episodes. Personality & Social Psychology Bulletin, 11, 75-88.
- Forgas, J. P., Morris, S. L., & Furnham, A. (1982). Lay explanations of wealth: Attributions for economic success. Journal of Applied Social Psychology, 381-397.
- Fox, G. E. (1973). Honor, shame and women's liberation in Cuba: Views of working-class emigré men. In A. Pescatello (Ed.), Female and male in Latin America (pp. 273-290). Pittsburgh: University of Pittsburgh Press.
- Garza, R. T. (1977). Personal control and fatalism in Chicanos and Anglos: Conceptual and methodological issues. In J. L. Martinez (Ed.), Chicano psychology (pp. 97-108). New York: Academic Press.
- Garza, R. T., & Ames, R. E. (1976). A comparison of Chicanos and Anglos on locus of control. In C. A. Hernández, M. J. Haug & N. N. Wagner (Eds.), Chicanos: Social and psychological perspectives (pp. 133-135). St. Louis: Mosby.
- Geertz, C. (1973). The interpretation of cultures. New York: Basic Books.
- Gil, V. E. (1976). The personal adjustment and acculturation of Cuban immigrants in Los Angeles. Doctoral dissertation. Ann Arbor, MI: University Microfilms, #BFJ 76-16650.
- Giraldo, O. (1972). El machismo como fenómeno psico-cultural. Revista Latinoamericana de Psicología, 4, 295-310.

- Glazer, N., & Moynihan, D. P. (1963). Beyond the melting pot. Cambridge, MA: Harvard-MIT Press.
- Goodenough, W. H. (1957). Cultural anthropology and linguistics. In P. Gavin (Ed.), Report of the 74th Annual Round Table Meeting on Linguistics and Language Society (pp. 100-110). Washington, DC: Georgetown University Monographs on Language and Linguistics, No. 9.
- Goodenough, W. H. (1970). Description and comparison in cultural anthropology. Chicago: Aldine.
- Goodenough, W. H. (1981). Culture, language and society (2nd ed.). Menlo Park, CA: Benjamin/Cummings. (Originally published 1971).
- Goodman, M. E., & Beman, A. (1968). Child's-eye-views of life in an urban barrio. In J. Helm (Ed.), Spanish speaking people in the United States (pp. 84-103). Seattle: University of Washington Press.
- Heller, C. S. (1966). Mexican American youth: Forgotten youth at the crossroad. New York: Random House.
- Henderson, G. (1979). Understanding and counseling ethnic minorities. Springfield, IL: Charles C. Thomas.
- Henry, J. P., & Stephens, P. M. (1977). Stress, health, and the social environment: A sociobiologic approach to medicine. New York: Springer-Verlag.
- Herskovits, M. J. (1955). Cultural anthropology. New York: Knopf.
- Hofstede, G. (1980). Culture's consequences. Beverly Hills, CA: Sage.
- Holtzman, W., Díaz-Guerrero, R., & Swartz, J. D. (1975). Personality development in two cultures: A cross-cultural longitudinal study of schoolchildren in Mexico and the United States. Austin, TX: University of Texas Press.
- Hsu, F. L. K. (1983). Rugged individualism reconsidered. Knoxville, TN: University of Tennessee Press.

- Hui, C. H. (1982). Locus of control: A review of cross-cultural research. International Journal of Intercultural Relations, 6, 301-323.
- Hui, C. H. (1984). Individualism-collectivism: Theory, measurement, and its relation to reward allocation. Unpublished doctoral dissertation, University of Illinois, Urbana-Champaign.
- Hui, C. H., Dragow, F., & Chang, B-H. (1983). Analysis of the modernity scale: An item response theory approach. Journal of Cross-Cultural Psychology, 14, 259-278.
- Hui, C. H., & Triandis, H. C. (1983). Multistrategy approach to cross-cultural research: The case of locus of control. Journal of Cross-Cultural Psychology, 14, 65-84.
- Hui, C. H., & Triandis, H. C. (1985). Measurement in cross-cultural psychology: A review and comparison of strategies. Journal of Cross-Cultural Psychology, 16, 131-152.
- Hui, C. H., & Triandis, H. C. (In press, a). The instability of response sets. Public Opinion Quarterly.
- Hui, C. H., & Triandis H. C. (In press, b). Individualism-collectivism: A study of cross-cultural researchers. Journal of Cross-Cultural Psychology.
- Jahoda, G. (1980). Theoretical and systematic approaches in cross-cultural psychology. In H. C. Triandis & W. W. Lambert (Eds.), Handbook of cross-cultural psychology (Vol. 1, pp. 69-142). Boston: Allyn & Bacon.
- Kagan, S. (1977). Social motives and behaviors of Mexican-Americans and Anglo children. In J. L. Martinez (Ed.), Chicano psychology (pp.45-86). New York: Academic.
- Kagan, S., & Madsen, M. C. (1971). Cooperation and competition of Mexican, Mexican-American, and Anglo-American children of two ages under four instructional sets. Developmental Psychology, 5, 32-39.

- Keessing, R. M. (1981). Theories of culture. In R. W. Casson (Ed.), Language, culture and cognition: Anthropological perspectives (pp. 42-66). New York: Macmillan.
- Kluckhohn, F. R., & Strodtbeck, F. L. (1961). Variations in value orientations. Westport, CT: Greenwood.
- Kroeber, A. L., & Kluckhohn, C. (1952). Culture: A critical review of concepts and definitions, (Vol. 47, No. 1). Cambridge, MA: Peabody Museum.
- Landy, D. (1959). Tropical childhood: Cultural transmission and learning in a rural Puerto Rican village. Chapel Hill, NC: University of North Carolina Press.
- Laosa, L. M., Swartz, J. D., & Diaz-Guerrero, R. (1974). Perceptual-cognitive and personality development of Mexican and Anglo-American children as measured by human figures drawings. Developmental Psychology, 10, 131-139.
- Levi-Straus, C. (1958). Anthropologie Structurale [Structural Anthropology]. Paris: Plon.
- Lewis, G. K. (1964). Puerto Rico: Freedom and power in the Caribbean. New York: Monthly Review Press.
- Lewis, O., Lewis, R. M., & Rigdon, S. M. (1978). Neighbors: Living the revolution. An oral history of contemporary Cuba. Urbana, IL: University of Illinois Press.
- Lisansky, J. (1981). Interpersonal relations among Hispanics in the United States: A content analysis of the social science literature (Tech. Rep. No. ONR-3). Champaign, IL: University of Illinois, Department of Psychology.
- MacGaffey, W., & Barnett, C. R. (1962). Cuba: Its people, its society, its culture. New Haven, CT: HRAF Press.

- Madsen, W. (1972/1967). Mexican-Americans of south Texas. New York: Holt, Rinehart and Winston.
- Manners, R. A. (1956). Tabara: Subcultures of a tobacco and mixed crops municipality. In J. Steward (Ed.), The people of Puerto Rico (93-170). Urbana, IL: University of Illinois Press.
- Marin, G., Triandis, H. C., Betancourt, H., & Kashima, Y. (1983). Ethnic affirmation versus social desirability: Explaining discrepancies in bilinguals' responses to a questionnaire. Journal of Cross-Cultural Psychology, 14, 173-186.
- McClintock, C. G. (1976). Development of social motives in Anglo-American and Mexican-American children. In C. A. Hernandez et al., (Eds.), Social and psychological perspectives (126-132). St. Louis: Mosby.
- Mead, M. (1953). Cultural patterns and technical change. Paris: United Nations Educational, Scientific and Cultural Organizations.
- Meier, M. S., & Rivera, F. (1972). The Chicanos: A history of Mexican Americans. New York: Hill & Wang.
- Mintz, S. W. (1956). Cañamelar: The subculture of a rural sugar plantation proletariat. In J. Steward (Ed.), The people of Puerto Rico (pp. 314-417). Urbana, IL: University of Illinois Press.
- Mintz, S. W. (1966). Puerto Rico; an essay in the definition of a national culture. In Status of Puerto Rico: Selected background studies for the U.S.-P.R. Commission on the Status of Puerto Rico (pp. 339-434). Washington, DC: U.S. Government Printing Office.
- Moreno, J. (1971). From traditional to modern values. In C. Mesa-Lago (Ed.), Revolutionary change in Cuba (471-497). Pittsburgh, PA: University of Pittsburgh Press.
- Murdock, G. (1945). The common denominators of culture. In R. Linton (Ed.), The science of man in the world crisis. New York: Columbia University Press.

- Murillo, N. (1976). The Mexican-American family. In C. A. Hernandez et al. (Eds.), Chicanos: Social and psychological perspectives (pp. 15-25). St. Louis: Mosby.
- Naroll, R. (1983). The moral order. Beverly Hills, CA: Sage.
- Pacheco, A. M., & Lucca-Irizarry, N. L. (1983). A cross-cultural comparison of the concept of death in young adults. Revista Interamericana de Psicología, 17, 35-47.
- Padilla, E. (1956). Nocorá: The subculture of workers on a government-owned sugar plantation. In J. Steward (Ed.), The people of Puerto Rico (pp. 265-313). Urbana, IL: University of Illinois Press.
- Padilla, E. (1964/1958). Up from Puerto Rico. New York: Columbia University Press.
- Peck, R. F., & Diaz-Guerrero, R. (1967). Two core-culture patterns and the diffusion of values across their border. International Journal of Psychology, 2, 275-282.
- Pelto, P. J., & Pelto, G. H. (1975). Intra-cultural diversity: Some theoretical issues. American Ethnologist, 2, 1-18.
- Perez, L. (1980). Cubans. In S. Thernstrom (Ed.), The Harvard encyclopedia of American ethnic groups (pp. 256-261). Cambridge, MA: Belknap Press.
- Pescatello, A. (1973). Female and male in Latin America. Pittsburgh, PA: University of Pittsburgh Press.
- Pitt-Rivers, J. (1966). Honour and social status. In J. G. Peristiany (Ed.), The values of Mediterranean society (pp. 19-78). Chicago: The University of Chicago Press.
- Ramirez III, M. (1976). Cognitive styles and cultural democracy in education. In C. A. Hernandez et al (Eds.), Chicanos: Social and psychological perspectives (pp. 196-203). St. Louis: Mosby.

- Roberts, K. H. (1970). On looking at an elephant: An evaluation of cross-cultural research related to organizations. Psychological Bulletin, 74, 327-350.
- Rohner, R. P. (1981). Toward a theory of culture for cross-cultural psychology. Unpublished manuscript, University of Connecticut, Department of Anthropology.
- Rojas, L. (1981). An anthropologist examines the Navy's recruiting process (Tech. Rep. No. 4). Champaign, IL: University of Illinois, Department of Psychology.
- Rojas, L. (1982). Salient Mainstream and Hispanic values in a Navy training environment: An anthropological description (Tech. Rep. ONR-22). Champaign, IL: University of Illinois, Department of Psychology.
- Rojas, L. (1983). Hispanics of a San Diego barrio (Tech. Rep. ONR-23). Champaign, IL: University of Illinois, Department of Psychology.
- Romano, O. I. (1960). Donship in a Mexican-American community in Texas. American Anthropologist, 62, 966-976.
- Ross, W., Triandis, H. C., Chang, B., & Marin, G. (1982). Work values of Hispanic and Mainstream Navy recruits (Tech. Rep. ONR-8). Champaign, IL: University of Illinois, Department of Psychology.
- Rubel, A. J. (1965). The Mexican American palomilla. Anthropological Linguistics, 7, 92-97.
- Rubel, A. J. (1970). Perceptions of social relations: A comparative analysis. In J. H. Burma (Ed.), Mexican-Americans in the United States: A reader (pp. 255-266). Cambridge: Schenkman.
- Saunders, L. (1954). Cultural differences and medical care of the Spanish speaking people of the southwest. New York: Russell Sage Foundation.
- Schneider, D. (1968). American kinship: A cultural account. Englewood Cliffs, NJ: Prentice-Hall.

- Seda, B. E. (1958). The normative patterns of the Puerto Rican family in various situational contexts. Doctoral dissertation. Ann Arbor, MI: University Microfilms International.
- Seda, E. (1973). Social change and personality in a Puerto Rican agrarian reform community. Evanston, IL: Northwestern University Press.
- Spiro, M. E. (1951). Culture and personality. The natural history of a false dichotomy. Psychiatry, 14, 19-46.
- Szalay, L. B. (1985). Psychocultural findings. In H. W. Sinaiko, P. M. Curran, B. T. King & J. M. Schneider (Eds.), Hispanic subpopulations and Naval service (Tech. Rep. SI/MRAS/TR-11). Washington, DC: Office of Naval Research.
- Szapocznik, J. (1980). A programmatic mental health approach to enhancing the meaning of life of Cuban elderly. Hispanic Report on families and youth. Washington, DC: COSSMHO.
- Szapocznik, J., Kurtines, W., & Hanna, N. (1979). Comparison of Cuban and Anglo-American cultural values in a clinical population. Journal of Consulting and Clinical Psychology, 47, 623-624.
- Szapocznik, J., Scopetta, M. A., Aranalde, M., & Kurtines, W. (1978a). Cuban value structure: Treatment implications. Journal of Consulting and Clinical Psychology, 46, 961-970.
- Szapocznik, J., Scopetta, M. A., & King, O. E. (1978b). Theory and practice in matching treatment to the special characteristics and problems of Cuban immigrants. Journal of Community Psychology, 6, 112-122.
- Triandis, H. C. (1972). The analysis of subjective culture. New York: Wiley.
- Triandis, H. C. (1976). The future of pluralism. Journal of Social Issues, 32, 179-208.
- Triandis, H. C. (1980). Values, attitudes and interpersonal behavior. In H. E. Howe, Jr., & M. M. Page (Eds.), 1979 Nebraska Symposium on Motivation. Lincoln: University of Nebraska Press.

- Triandis, H. C. (1981). Hispanic concerns about the U.S. Navy (Tech. Rep. 1). Champaign, IL: University of Illinois, Department of Psychology.
- Triandis, H. C. (1983a). Dimensions of cultural variations as parameters of organizational theories. International Studies of Management and Organization, 12, 139-169.
- Triandis, H. C. (1983b). Allocentric vs. idiocentric social behavior: A major cultural difference between Hispanics and the mainstream (Tech. Rep. 16). Champaign, IL: University of Illinois, Department of Psychology.
- Triandis, H. C. (1984). A theoretical framework for the more efficient construction of culture assimilators. International Journal of Intercultural Relations, 8, 301-330.
- Triandis, H. C. (1985). Collectivism vs. individualism: A reconceptualization of a basic concept in cross-cultural social psychology. In C. Bagley & G. K. Verma (Eds.), Personality, cognition and values: Cross-cultural perspectives of childhood and adolescence. London: Macmillan.
- Triandis, H. C., & Brislin, R. W. (1984). Cross-cultural psychology. American Psychologist, 39, 955-969.
- Triandis, H. C., & Hui, C. H., Albert, R. D., Leung, S., Lisansky, J., Diaz, R., Plascencia, L., Marin, G., Betancourt, H., & Loyola, L. (1984). Individual models of social behavior. Journal of Personality and Social Psychology, 46, 1389-1404.
- Triandis, H. C., Kashima, Y., Hui, C. H., Lisansky, J., & Marin, G. (1982). Acculturation and biculturalism indices among relatively acculturated Hispanic young adults. Interamerican Journal of Psychology, 16, 140-149.
- Triandis, H. C., Kashima, Y., Lisansky, J., & Marin, G. (1982). Self-concepts and values among Hispanic and Mainstream Navy recruits (Tech.

Rep. No. ONR-7). Champaign, IL: University of Illinois, Department of Psychology.

Triandis, H. C., Kashima, Y., Shimada, E., & Villareal, M. (In press).

Acculturation indices as a means of confirming cultural differences.
International Journal of Psychology.

Triandis, H. C., Lisansky, J., Setiadi, B., Chang, B., Marin, G., & Betancourt, H. (1982). Stereotyping among Hispanics and Anglos: The uniformity, intensity, direction and quality of auto- and heterostereotypes. Journal of Cross-Cultural Psychology, 13, 409-426.

Triandis, H. C., & Marin, G. (1983a). Etic plus emic versus pseudoetic: A test of a basic assumption of contemporary cross-cultural psychology. Journal of Cross-Cultural Psychology, 14, 489-500.

Triandis, H. C., & Marin, G. (1983b). Distortions introduced by the use of bipolar scales in stereotype research. Journal of Social Psychology, 121, 153-154.

Triandis, H. C., Marin, G., Betancourt, H., & Chang, B. (1982). Acculturation, biculturalism and familism among Hispanic and Mainstream Navy recruits (Tech. Rep. No. ONR-15). Champaign, IL: University of Illinois, Department of Psychology.

Triandis, H. C., Marin, G., Betancourt, H., Lisansky, J., & Chang, B. (1982). Dimensions of familism among Hispanic and Mainstream Navy recruits (Tech. Rep. No. 14). Champaign, IL: University of Illinois, Department of Psychology.

Triandis, H. C., Marin, G., Hui, C. H., Lisansky, J., & Ottati, V. (1984). Role perceptions of Hispanic young adults. Journal of Cross-Cultural Psychology, 15, 297-320.

Triandis, H. C., Marin, G., Lisansky, J., & Betancourt, H. (1984). Simpatia as a cultural script of Hispanics. Journal of Personality and Social Psychology, 47, 1363-1375.

- Triandis, H. C., Ottati, V., & Marin, G. (1982a). Achievement motives of Hispanic and Mainstream Navy recruits (Tech. Rep. 5). Champaign, IL: University of Illinois, Department of Psychology.
- Triandis, H. C., Ottati, V., & Marin, G. (1982b). Social attitudes among Hispanic and mainstream Navy recruits (Tech. Rep. ONR-10). Champaign, IL: University of Illinois, Department of Psychology.
- Triandis, H. C., Vassiliou, V., & Nassiakou, M. (1968). Three cross-cultural studies of subjective culture. Journal of Personality and Social Psychology Monograph Supplement, 8, No. 4, 1-42.
- Wagenheim, K. (1972). Puerto Rico, a profile. New York: Praeger.
- Wagley, C. (1968). The Latin American tradition. New York: Columbia University Press.
- Wells, H. (1969). The modernization of Puerto Rico. Cambridge, MA: Harvard University Press.
- Wolf, K. L. (1972). Growing up and its price in three Puerto Rican subcultures. In E. F. Mendez (Ed.), Portrait of a society: Readings on Puerto Rican sociology (pp. 233-276). San Juan: University of Puerto Rico Press.

Notes

1. The following findings were considered most useful:

- (a) Finding: The levels of achievement motivation (striving for excellence in performance) among Hispanic and nonHispanic Navy recruits are equivalent.

Possible implication: Given that Hispanics are not sent to the more prestigious training schools, at the same rate as the nonHispanic, Hispanics are more likely to be dissatisfied with their job assignments.

- (b) NonHispanic Navy recruits have reasonably clear ideas about what they need to do to reach particular career goals within the Navy. Hispanic Navy recruits have vague and sometimes mistaken ideas about what they need to do to reach particular goals within the Navy.

Implication: Hispanics are likely to end in less desirable jobs, and will be less satisfied than the nonHispanics with their job assignments.

- (c) The Navy is recruiting mostly those acculturated Hispanics whose values are quite similar to the values of the nonHispanics.

Implications for setting targets for recruitment goals.

- (d) There are no differences between Hispanic and nonHispanic Navy recruits in the kinds of causes they perceive as responsible for their successes and failures.

Implication: Hispanic and nonHispanic recruits are quite similar in important respects.

- (e) Hispanic Navy recruits have a very positive view of themselves.

This finding is inconsistent with previous social science reports which stated that most Hispanics are unsure of themselves.

Implication: The Navy is selecting atypical Hispanics. With present selection policies the goal of having many Hispanics in the Navy may not be attainable.

- (f) Most Navy recruits like to have certainty about their social environment--rules, regulations, likes to know what is expected of them. Hispanics are even higher than the nonHispanics in this tendency.

- (g) Both Hispanic and nonHispanic Navy recruits see work as a more important value than is typical for the U.S. population as a whole.

Implication: The Navy is selecting better than average recruits.

- (h) Most of the residents in the barrio do not have the kinds of work skills needed to join the Navy. Nevertheless, there are substantial numbers that do have such skills.

Implications: Recruitment in the barrio will be time consuming, but will produce results.

- (i) Most people have a need for social and interpersonal supports, in order to enjoy their jobs. Hispanics need such interpersonal support even more than others.

Implications: Officers should give Hispanics a pat on the back more reliably and repeatedly than they normally do.

- (j) Acculturation involves complex skills and attitudes. The Navy will benefit from systematic mixing of acculturated and unacculturated Hispanics.

Implications: team formation.

2. The Navy Wide Demographic Data, published by the Naval Military Personnel Command confirm this point. For example, at level E9 the percentages of Whites, Blacks and Hispanics are .81, .37 and .26 (i.e. one quarter of one percent). The same data show that the percentages in grades E1 to E4 for Hispanics are higher than for Whites; for E4 to E9 there is reversal with the white percentages higher than the Hispanic.

Publications:

- Lisansky, J. (1980). Santa Terezinha: Life in a Brazilian frontier town. Doctoral dissertation, University of Florida.
- Triandis, H. C. (1980). Social factors in science education. Instructional Science, 9, 163-181.
- Triandis, H. C. (1980). Values, attitudes and interpersonal behavior. In H. Howe & M. Page (Eds.), Nebraska Symposium on Motivation, 1979, Vol. 27, 195-260. Lincoln, NE: University of Nebraska Press.
- Hulin, C. L., & Triandis, H. C. (1981). Meaning of work in different organizational environments. In P. C. Nystrom & W. H. Starbuck (Eds.), Handbook of Organizational Design. New York: Oxford University Press, pp. 336-357.
- Hui, C. H. (1982). Locus of control: A review of cross-cultural research. International Journal of Intercultural Relations, 6, 301-323.
- Triandis, H. C., Lisansky, J., Setiadi, B., Chang, B., Marin, G., & Betancourt, H. (1982). Stereotyping among Hispanics and Anglos: The uniformity, intensity, direction, and quality of auto- and hetero-stereotypes. Journal of Cross-Cultural Psychology, 13, 409-426.
- Triandis, H. C., Kashima, Y., Hui, C. H., Lisansky, J., & Marin, G. (1982). Acculturation and biculturalism indices among relatively acculturated Hispanic young adults. Interamerican Journal of Psychology, 16, 140-149.
- Triandis, H. C. (1983). One perspective on cross-cultural psychology. Acta Psychologica Sinica, 15, 306-310.
- Triandis, H. C. (1983). Dimensions of cultural variations as parameters of organizational theories. International Studies of Management and Organization, 12, 139-169.

- Triandis, H. C. (1983). Essentials of studying cultures. In D. Landis & R. Brislin (Eds.), Handbook of intercultural training, Vol. 1. New York: Pergamon, pp. 82-117.
- Hui, C. H., & Triandis, H. C. (1983). Multistrategy approach to cross-cultural research: The case of locus of control. Journal of Cross-Cultural Psychology, 14, 65-84.
- Marin, G., Triandis, H. C., Betancourt, H., & Kashima, Y. (1983). Ethnic affirmation versus social desirability: Explaining discrepancies in bilingual responses to a questionnaire. Journal of Cross-Cultural Psychology, 14, 173-186.
- Triandis, H. C. (1983). Some dimensions of intercultural variation and their implications for community psychology. Journal of Community Psychology, 11, 285-302.
- Triandis, H. C., & Marin, G. (1983). Etic plus emic versus pseudoetic: A test of a basic assumption of contemporary cross-cultural psychology. Journal of Cross-Cultural Psychology, 14, 489-500.
- Triandis, H. C., & Marin, G. (1983). Distortions introduced by the use of bipolar scales in stereotype research. The Journal of Social Psychology, 121, 153-154.
- Triandis, H. C. (1984). Toward a psychological theory of economic growth. International Journal of Psychology, 19, 79-95.
- Triandis, H. C., Hui, C. H., Albert, R. D., Leung, S., Lisansky, J., Diaz, R., Plascencia, L., Marin, G., Betancourt, H., & Loyola, L. (1984). Individual models of social behavior. Journal of Personality and Social Psychology, 46, 1389-1404.
- Triandis, H. C., & Brislin, R. W. (1984). Cross-cultural psychology. American Psychologist, 39, 955-969.
- Triandis, H. C., Marin, G., Hui, C. H., Lisansky, J., & Ottati, V. (1984). Role perceptions of Hispanic young adults. Journal of Cross-Cultural Psychology, 15, 297-320.

- Triandis, H. C., Marin, G., Lisansky, J., & Betancourt, H. (1984). Simpatia as a cultural script of Hispanics. Journal of Personality and Social Psychology, 47, 1363-1375.
- Triandis, H. C., Adaopoulos, J., & Brinberg, D. (1984). Perspectives and issues in the study of attitudes. In R. L. Jones (Ed.), Attitude and attitude change in special education: Theory and practice. Reston, VA: Council for Exceptional Children.
- Triandis, H. C. (1984). A theoretical framework for the more efficient construction of culture assimilators. International Journal of Intercultural Relations, 8, 301-330.
- Hui, C. H., & Triandis, H. C. (1985). Measurement in cross-cultural psychology: A review and comparison of strategies. Journal of Cross-Cultural Psychology, 16, 131-152.
- Triandis, H. C. (1987). Cross-cultural industrial and organizational psychology. In M. Dunnette (Ed.), Handbook of Industrial and Organizational Psychology (2nd edition). Chicago: Rand McNally.

Recognition:

The P.I. was chosen by the Board of Governors of the Interamerican Society of Psychology to receive the Third Interamerican Psychology Award. This award was created by the Society (which includes psychologists from both North and South America) "to acknowledge those colleagues who have made significant contributions to the development of psychology as a science and a profession in the Americas." The award was presented during the meeting of the Interamerican Congress of Psychology in Santo Domingo, Dominican Republic (June 21-26, 1981). It is given to one psychologist from the North and one from the South of the Americas. The P.I. presented an award-lecture to the Congress reporting some results from the project.

Triandis was elected President of the Interamerican Society of Psychology for 1985-87.

The P.I. judged entries for the American Association for the Advancement of Science social psychology prize (1980-81).

The P.I. gave the introductory lecture to the SIETAR-sponsored workshop on intercultural relations in Bradford, England in July, 1981.

Triandis was elected Vice-President of the International Association of Applied Psychology and an Honorary Fellow of the International Association of Cross-Cultural Psychology.

Recognition of Louis Rojas' presentation at meeting of Association of Naval Services Officers was given in a letter received from Commander Ramon Garcia.

Triandis was appointed "distinguished lecturer" by the Fulbright program for a 21-day period in September-October, 1983, to give 10 lectures at the most distinguished psychology departments in India.

The P.I. was elected fellow of the American Association for the Advancement of Science in 1984. The citation was: "For many contributions to the

theory, method, and data stores in cross-cultural psychology and the analysis of subjective culture."

Triandis was one of five Americans who gave "distinguished invited addresses" at the International Congress of Scientific Psychology, in Acapulco, Mexico, September 3-7, 1984. There were 20 such invited addresses. The P.I.'s topic was "The Relevance of Cross-Cultural Psychology for Mainstream Psychology."

The P.I. was elected chairman of a conference, sponsored by UNESCO in Buenos Aires, Argentina, November 19-22, 1984, to design a cross-cultural study of values.

The P.I. was invited to deliver key-note addresses by both the Japanese and Pakistan Psychological Associations, in connection with their 1985 annual meetings.

Financial Status:

Balance: Zero

APPENDIX

Technical Reports

- Technical Report No. 1. Triandis, H. C. (April, 1981). Hispanic concerns about the U.S. Navy.
- Technical Report No. 2. Triandis, H. C. (May, 1981). Some dimensions of intercultural variation and their implications for interpersonal behavior.
- Technical Report No. 3. Lisansky, J. (October, 1981). Interpersonal relations among Hispanics in the United States: A content analysis of the social science literature.
- Technical Report No. 4. Rojas, L. (December, 1981). An anthropologist examines the Navy's recruiting process.
- Technical Report No. 5. Triandis, H. C., Ottati, V., & Marin, G. (February, 1982). Achievement motives of Hispanic and mainstream Navy recruits.
- Technical Report No. 6. Triandis, H. C., Hui, C. H., Lisansky, J., & Marin, G. (February, 1982). Acculturation and Biculturalism among Hispanic Navy recruits.
- Technical Report No. ONR-7. Triandis, H. C., Kashima, Y., Lisansky, J., & Marin, G. (February, 1982). Self-concepts and values among Hispanic and mainstream Navy recruits.
- Technical Report No. ONR-8. Ross, W., Triandis, H. C., Chang, B., & Marin, G. (March, 1982). Work values of Hispanic and mainstream Navy recruits.
- Technical Report No. ONR-9. Hui, C. H., Triandis, H. C., & Chang, B. (March, 1982). Locus of control among mainstream and Hispanic Navy recruits: A methodological and substantive study.
- Technical Report No. ONR-10. Triandis, H. C., Ottati, V., & Marin, G. (April, 1982). Social attitudes among Hispanic and mainstream Navy recruits.

- Technical Report No. ONR-11. Triandis, H. C., Hui, C. H., Lisansky, J., Marin, G., Betancourt, H., & Ottati, V. (April, 1982). Perceptions of supervisor-subordinate relations among Hispanic and mainstream recruits.
- Technical Report No. ONR-12. Hui, C. H., & Triandis, H. C. (April, 1982). Locus of control, religiosity, theistic externality, and occult beliefs among mainstream and Hispanic Navy recruits.
- Technical Report No. ONR-13. Triandis, H. C., Marin, G., Betancourt, H., Lisansky, J., Setiadi, B., & Chang, B. (April, 1982). Stereotyping among Hispanic and mainstream Navy recruits.
- Technical Report No. ONR-14. Triandis, H. C., Marin, G., Betancourt, H., Lisansky, J., & Chang, B. (May, 1982). Dimensions of familism among Hispanic and mainstream Navy recruits.
- Technical Report No. ONR-15. Triandis, H. C., Marin, G., Betancourt, H., & Chang, B. (May, 1982). Acculturation, biculturalism and familism among Hispanic and mainstream Navy recruits.
- Technical Report No. ONR-16. Triandis, H. C. (March, 1983). Allocentric vs. idiocentric social behavior: A major cultural difference between Hispanics and the mainstream.
- Technical Report No. ONR-17. Marin, G., Betancourt, H., & Triandis, H. C. (August, 1982). Perceived acceptability of acculturative behaviors by Hispanic and mainstream Navy recruits.
- Technical Report No. ONR-18. Marin, G., Betancourt, H., Triandis, H. C., & Kashima, Y. (August, 1982). Ethnic affirmation versus social desirability as a determinant of discrepancies in the responses of Hispanic bilinguals to Spanish and English versions of a questionnaire.
- Technical Report No. ONR-19. Triandis, H. C., Marin, G., Betancourt, H., Lisansky, J., & Chang, B. (August, 1982). Simpatía as a cultural script of Hispanics.

Technical Report No. ONR-20. Triandis, H. C., Marin, G., & Betancourt, H. (August, 1982). Acculturation and the acceptance of contact among Hispanic and mainstream Navy recruits.

Technical Report No. ONR-21. Triandis, H. C., Marin, G., Betancourt, H., & Kashima, Y. (August, 1982). Attributions of success and failure among Hispanic and mainstream Navy recruits.

Technical Report No. ONR-22. Rojas, L. A. (August, 1982). Salient mainstream and Hispanic values in a Navy training environment: An anthropological description.

Technical Report No. ONR-23. Rojas, L. A. (April, 1983). Hispanics of a San Diego barrio.

Technical Report No. ONR-24. Triandis, H. C., Marin, G., Hui, C. H., Lisansky, J., & Ottati, V. (December, 1982). Role perceptions of Hispanic and mainstream Navy recruits.

Technical Report No. ONR-25. Triandis, H. C., & Hui, C. H. (December, 1982). Locus of control in Hispanic and mainstream samples.

Technical Report No. ONR-26. Triandis, H. C., Marin, G., & Hui, C. H. (December, 1982). Affective meaning among Hispanic and mainstream Navy recruits.

Technical Report No. ONR-27. Triandis, H. C., Kashima, Y., Shimada, E., & Villareal, M. (October, 1983). Acculturation Indices as a means of confirming cultural differences.

Technical Report No. ONR-28. Villareal, M., & Triandis, H. C. (November, 1983). Navy recruit's expectations of productivity, liking, and intentions to quit under different supervisors.

Technical Report No. ONR-29. Triandis, H. C., Villareal, M., & Natalicio, L. (March, 1984). Some aspects of the subjective culture of Hispanic high school students.

Technical Report No. ONR-30. Triandis, H. C., Leung, K., & Villareal, M. (July, 1984). Convergent and discriminant validation of measures of collectivism.

Technical Report No. ONR-31. Hui, C. H. (July, 1984). Development and validation of an individualism-collectivism scale.

Technical Report No. ONR-32. Hui, C. H., & Triandis, H. C. (July, 1984). The effects of partner relationship, resource availability, culture and collectivist tendency on reward allocation.

Technical Report No. ONR-33. Triandis, H. C., Villareal, M. J., & Clack, F. L. (October, 1984). Allocentric vs. idiocentric tendencies: Convergent and discriminant validation.

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